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THE

Medical and Physical Journal.

VOL. X.] OCTOBER 1, 1803. [NO. LVI.

Printed for R. PHILLIPS, by W. Thorne, Red Lion Court, Fleet Street, London.

DR. BEDDOES'S COLLECTION OF PAPERS ON THE INFLUENZA.

PART II. continued.

72. Mr. WILLIAMS, Merthyr, Glamorganshire, June 7, 1803.

NO facts have occurred to me to enable me to form a *decisive* opinion, whether the influenza is infectious or otherwise; but I am inclined to think that it is contagious, for the following reasons: Whenever one in a family was attacked with it, in general the major part or the whole of that family caught it; the great and sudden depression which so constantly attended it, bears strong affinity to other contagious diseases, and also its general progress. The disease appeared at Surowy iron-works, eight miles from Merthyr, about the 20th of February, and in a few days after at Merthyr, and it has not yet entirely disappeared. I did not observe that the men were attacked in sets or classes at Merthyr iron-works or the neighbouring iron-works. This is the sum of what I have had opportunities of remarking.

73. Dr. HOBBES, Swansea, April 15, 1803.

The few observations I have made respecting the influenza, lead me to judge that it is contagious.

I was induced to form this opinion from remarking that the influenza had travelled (if I may be allowed to use the expression) from the east to this place. For we heard of a complaint which attacked whole families in the neighbourhood of Cowbridge, Pyle, and between Pyle and Briton Ferry, before the influenza was known here. I have also been credibly informed, that the influenza did not

reach that part of Carmarthenshire which is near to this place, until after it had made its appearance at Swansea. The following fact likewise disposed me to consider the complaint as contagious: A gentleman and lady came in the beginning of March, upon a visit to a gentleman's house in the neighbourhood of Briton Ferry, where some of the family were labouring under the influenza. They came from a part of Carmarthenshire where the disease had not shewed itself. The lady was seized in the course of a few days after her arrival, and the gentleman a few days afterwards.

On comparing a number of cases, I do think the influenza distinguishable from common catarrh. I cannot, however, myself, call to mind a case (although other medical men seem to think they have seen such) where catarrhal symptoms of some description or other did not take place. But they could not, in my opinion, determine the disorder to be merely common catarrh. For example, a lady was teased with incessant cough, which lasted from four o'clock in the evening until four o'clock the next morning, it then left her; she had no more of it, nor had she any other symptom of catarrh; fever however continued with pain of the back for some days. Others have been seized with running at the nose, which lasted several hours without any other catarrhal symptom; fever, with pain of the back, then succeeded, and lasted some days.

In those instances, where the chest was much affected, and symptoms of pneumonia took place (which mostly happened when people advanced in years were attacked) it might be doubtful whether the symptoms belonged to common catarrh or the influenza.

The depression in this complaint, is certainly greater and more sudden than is ever observed in common catarrh. Indeed, the depression has always appeared to me a distinguishable and leading symptom of the complaint. I have seen the disorder gradually proceed to the most formidable and fatal stage of pneumonia, and I have now a case where it has ended in low fever with extreme debility, but without any affection of the chest whatever.

The first case of well-marked influenza, I think, I saw on the 7th of March. The last case, on the 10th of April.

Last week I heard of the whole of a large family in the country being recently attacked. I do not hear this week of many fresh seizures.

74. Mr.

74. Mr. Harness, Tavistock, *July*, 1803.

The influenza first appeared in this neighbourhood about the middle of March, and went off the latter end of May.

It appeared in the town three weeks earlier than in the adjacent county, except in one instance.

After being general, *I* did not meet with *single* instances.

It certainly seemed to *me* to pass *from* person to person for the following reasons.

Two ladies of this place spent a few days at Exeter, and slept at a friend's house, where the family had been ill of the influenza (and indeed some part of it then laboured under the complaint): one of them was seized as she was returning, and the other two days after, and the whole of the family where they lodged had the complaint within ten days. About the same time, a person coming from Plymouth Dock, (where the influenza was very prevalent) was seized at a friend's house at a different part of the town from the ladies just mentioned, the family of this house likewise soon became infected; these were the first instances of the complaint in this town, but it soon became general.

I have not had any reason to suspect the contagion conveyed by articles of dress.

Several cases have occurred of a violent ardor urinæ (in women more particularly), this however soon gave way to the usual medicine.

Postscript from D. Geddes, Esq.

Mr. Harness desires me to add, that Mr. Carpenter's coachman returned very ill of the influenza from Bath, nearly about the same time, and communicated the disorder to his family, who live a mile from the town.

75. Dr. Vaughan May, Plymouth Dock, June 7, 1803.

During the months of November and December last, the winds prevailed in the eastern quarter, which continued in January and part of February of the present year. In this period, diarrhœa and cholera were very prevalent; so nearly similar to that preceding the influenza of 1788, that to many of my friends, I hazarded a pretty confident opinion of an expected return. In this I was not deceived, for about the latter end of February, it began its course. About the middle of March, I believe it was most prevalent, at least I found it so; and the last well-marked case I was called to on the 30th of April.

The symptoms were nearly similar to those I described in

in 1788, but I observed the debility in general was more considerable. Pneumonia in some cases prevailed so as to threaten danger, but I met with no loss of patients; nor did any of my medical brethren, excepting in a few instances of advanced age. Those who were attacked, excepting as above, recovered in proportion to their early or late applications for assistance; and I found no difficulty in speedily removing their complaints, by vomiting with tart. antim. & ipecac. which in general, if exhibited on the first or second day, totally removed every complaint. In other cases antimonial powder in small doses, combined with opiates and diluents, proved highly useful. In no case did I find it necessary to bleed; for though, in many instances, pneumonia was carried to a great height, yet, in my opinion, the pulse and general and excessive debility forbade it. In some few cases, after the fever had left the patients, and they were again about, I met with a violent, dry, spasmodic cough, which did not give way to opiates; but when combined with digitalis in the dose of a grain of each night and morning, it completely answered my most sanguine wishes, after a very few doses.

Blistering was had recourse to in some instances, and I think with advantage; more particularly so, in those cases resembling low fever, of which there were many; and here I found the greatest advantage from bark and wine, after premising an emetic and laxative.

I am inclined to consider the influenza contagious, for when it first made its appearance, it certainly attacked individuals; and I have observed many instances where the children in families were first affected, and afterwards their parents; and in other instances, vice versa.

It certainly was no uncommon thing for many o a family to be seized together, and this has operated on the minds of many against contagion, and in favour of diffusion of pestilence through the atmosphere. Has this not been the case with the epidemic measles and small-pox, as described by Sydenham and others?

I know but of few exceptions where it has entered a family, and there was certainly no difference from exceptions in measles, &c. In many instances, undoubtedly, the resemblance to common catarrh was such as to make the decision doubtful. I think the only symptom which decided the complaint in such cases, was debility, and it certainly did appear in all gradations from pneumonia to low fever.

I never observed that any particular classes were exempt, but

but the soldiers in the ordnance department were certainly not so generally affected as in the influenza of 1788.

It seems to me there was pretty much regularity in the rout of the disease. I believe there can be no doubt of this being the same with that of Paris, and which we have understood carried off such a number of people. From Paris it broke out in London, taking a western course until it reached this place; from hence it went into Cornwall, where it now rages, as well as in Ireland. This has been urged to me in favour of diffusion of pestilence through the atmosphere! In that case, how is it that it did not prevail in two neighbouring counties, viz. Devon and Cornwall, at the same time? which it certainly did not. This appears to me a strong point in favour of contagion.

As this is a matter of some importance, I shall be happy to see your opinion at large on the subject; and if these observations are of any use to you, they are quite at your service.

76. Mr. Whitlock, Ottery St. Mary, July 15, 1803.

I attended many patients in the latter part of the month of February, whose symptoms were not sufficiently marked for me to say decidedly whether they were cases of common catarrh or influenza. In the beginning of March, however, the characteristic symptoms of influenza were too apparent to be mistaken, and its distinctive character was never completely lost until its total disappearance, which, in my practice, took place about the first week in June.

The date of its commencement *was* different in different situations. I did not attend any patient out of the parish of Ottery, until the end of March.

I attended but few *solitary* cases during the time of its being rife in this neighbourhood, and those *solely* in the early part of its progress.

As far as my observations go, the disease was most decidedly *contagious*, and *readily* communicable from one person to another. Many had second attacks in consequence of their attendance on sick relatives.

I will take the liberty of adding, that very young infants appeared less susceptible of the infection than adults; nor did I see one case where they did not resist the disease altogether, until many of the persons, to whose care they were committed, had been attacked by the complaint in succession.

 77. Mr.

77. Mr. Gidely, *Penzance, July 10, 1803.*

The influenza began first in the parishes nearest the Land's End, about the beginning of March, and was prevalent there at least a week or ten days before its appearance in this town, which was on the 25th of March, and then it was general over the whole neighbourhood, and did not cease to be so until the middle or latter end of April. Single instances occurred for a long time after, and cases till very lately have appeared in different places.

I thought it evidently infectious, and Mr. Borlace says he has no doubt of its being so, having marked the progress of it in his own family, himself having caught it during his visiting some patients confined with it, and those who were most with him following in succession.

Whether conveyed by articles of dress, I cannot answer, as I never observed it.

A family now residing here, but who belong to Essex, and for particular reasons had to dread the disease, used every means of prevention, as avoiding communication or converse with infected houses, wearing camphor, using vinegar, &c. and were fortunate enough all to escape. I believe it was the only house where some or all of the family were not attacked; not one medical man escaped.

It was mortal only in a few instances, and the subject was either consumptive or asthmatic, and its course to a fatal termination was then very rapid.

The disease appeared at Helston about a fortnight after its being general here, but was so slight a disease that the surgeons can give no account of it.

78. Mr. Williams, *Aberystwyth, July 8, 1803.*

The influenza appeared here about the 17th or 18th of March, exerted its greatest influence from the 1st to the 13th of April, and did not entirely leave us till the second week in May.

It appeared in different places at different dates. My practice takes in a circuit of about twenty miles. It was known twenty miles south of this place, ten or twelve days before it was here, and was upwards of a fortnight before it extended the same distance north.

The symptoms were nearly the same in all, but much more severe in those who had asthmatic affections; it proved fatal in this neighbourhood in one instance, and that was an elderly lady who had for some years been subject to severe paroxyms of asthma.

I have

I have some reason to think, that persons of a scrophulous consumptive habit, and who were liable to hæmoptysis, escaped this epidemic. If such is the fact, it cannot have escaped Dr. B's observation, and I shall be glad to know it.

I always thought it contagious, and have had no reasons to think otherwise.

79. Dr. Black, Newry, May 28, 1803.

I have seen a great deal of the influenza for more than two months past, and at no time have I entertained a doubt of its contagious nature. In general, it diffused itself through all the members of a family in which it once got a footing; and though many negative instances might be quoted, yet I am very far from thinking that these ought to overturn the affirmative proposition obviously resulting from a full induction of particulars. I do firmly believe that the negative examples in the most highly contagious diseases, of which we have any knowledge, plague for instance, and small-pox, are to the full as numerous and as remarkable as they have been in influenza. As far as I have been able to learn, its first appearance in this kingdom was in Dublin, the latter end of February or beginning of March, whence it gradually and not very rapidly diffused itself northwards, until it reached us the beginning of April, and so on in a regular progress. I will mention to you one circumstance which, I think, well illustrates its slow propagation from one district to another in the ordinary way of contagious diseases. At the time that the disease was raging at its height in this town, when scarcely a family was free from it, my friend, Dr. Crawford (brother to the late Adair Crawford) who resides at Lisburn, a town twenty-three miles north of this, was, on the 23d of April, called hither to my assistance in a case of another kind. He was much surprized when I informed him how very general this disease was with us, and how severe. He said, at Lisburn they were, *as yet*, unacquainted with it. But I understand that the town and neighbourhood of Lisburn have since that time suffered as much as other districts.

There was a circumstance observable in the nature of the disease itself, which appeared to me to convey strong evidence of its contagious nature. In a great number of instances, when the patient on the first seizure took a brisk purge of calomel and scammony, and instantly after that had operated, a sudorific medicine, he was free from all fever

fever on the third day. Yet, under these circumstances, there remained often for a week or longer, a debility, lassitude, prostration of strength and spirits, and loathing of animal food, which I was utterly at a loss to account for, except on the principle that a febrile contagion had been introduced into the system, and though its virulence or activity was mitigated or subdued, yet the effects enumerated (which are its ordinary effects) remained for some time.

It was very mortal in this country both in the higher and the lower classes, but on a different principle in these respectively. My opportunities of observation among the lower classes were not numerous; but I had reason to be satisfied that one great cause of its fatality was improper treatment, and more especially a liberal use of their panacea, whiskey In the better ranks, the chief sufferers were persons advanced in years, of full habits, and who had any weakness of the lungs, or afflux of fluids to that viscus, and more especially those who had been free livers. In many such the disease terminated by an effusion into the bronchiæ, for the elimination of which, the powers of expectoration were inadequate. I observed that emetics had a favourable effect on the expectoration, and opiates a most pernicious one

80. Dr. Ryan, Kilkenny, July 1803.

The influenza, which has so lately extended its influence all over the united kingdom, first made its appearance in this city the beginning of April last. Before it reached this quarter, or as far as I can learn, any other interior part of the country, it raged with great violence for many days in the principal sea port towns, as in Dublin, Cork, and Waterford; so that the probability is, it was imported on board of ship by passengers from England, Scotland, or some other country trading with us.

The first intimation I had of its approach was in the following way. A gentleman residing about eight miles from this place, on the high road from Cork, came to consult me about the state of his health, and during our conversation, thought it incumbent on him to inform me that he and his whole family had just recovered from the influenza. The day immediately preceding this, I was called upon to visit a patient, whom I considered to labour under a bilious fever, attended by a catarrhal affection, (a very usual combination in this part of the country) and treated it accordingly. About

About the fourth day the febrile symptoms being evidently on the retreat, while the cough continued more troublesome than before, I began to reflect on the conversation I had with my patient; and taking into consideration the circumstance of the influenza, (according to the reports of the newspapers) having prevailed in Cork for three weeks past, I now ventured to pronounce, that what I took for a bilious fever was in reality the influenza, which had got footing in different parts of this island. The event justified my opinion; the disorder, in less than a fortnight, having spread itself all over this city.

In some country places, isolated and detached from any adjacent dwelling, I have known the whole family continue exempt from the influenza until one of them happened to come to town, bring it home, and after a few days confinement, communicate it to the remainder. Though this epidemic diffused itself very extensively through all ranks and descriptions of people, I have, notwithstanding, observed many entire families to escape, that must have been constantly exposed to infection, supposing it to exist; nay, I have remarked that some who acted in quality of nurse-tenders in the family way, did not take it; but these were few indeed, when compared with the immense numbers who caught it by their attendance on the sick.

One source of error on this subject ought not to be passed by unnoticed; sometimes the symptoms were so slight, trivial, and evanescent, that many supposed they were fortunate enough to have escaped, who, in fact, had passed through the ordeal, but in such a way as scarcely to be conscious of any indisposition. From all this you will readily perceive that I am among the number of those who suppose the influenza to be contagious; and I really am so, but the limits of this letter prevent me from investigating the subject more in detail, and enumerating the various motives that determine me to this belief.

Before I enter upon a description of the disease in question, you may not probably think it irrelevant to the present enquiry, that I should transcribe, verbatim, from my book of reports, a note which I preserved of an epidemic catarrh, that prevailed very generally here in December, 1800.

Kilkenny, Jan. 1, 1801.

An epidemic catarrh or influenza has been very prevalent in this city and its neighbourhood for three weeks past and

and more, and was ushered in with the usual symptoms of pains in the limbs, a sense of cold or chilliness, cough, and coryza, with more or less of fever. In many instances, a considerable degree of inflammation of the lungs accompanied this disorder, which required copious bleeding and blistering, much more, indeed, than I ever found necessary in any similar epidemic. While this complaint was at its height, several cases of strongly marked pleuritis occurred at the same time. Whether they originated altogether in the reigning epidemic or no, it was not an easy matter at times to determine, but on some occasions such a connection was apparent; for though the characteristic symptoms of pleuritis were all present, still the softness of the pulse clearly pointed out a difference between it and the common pleurisy, to be met with every day. Moreover, the former did not by any means bear a repetition of blood-letting, as well as the latter usually does, except a relapse was brought on by exposing the body too soon after recovery to cold air, when it became necessary to use the lancet with as much freedom as in any other case whatsoever. In general the complaint was of a mild nature, and for the most part required no medical aid; abstaining from animal food and wine for a few days, and lying a bed were sufficient to accomplish a cure.——But to return to the immediate subject of my letter.

Children were not so liable to be attacked as grown-up persons, and with the former it was comparatively a mild disease; I saw but two children seriously ill, and they were relieved by the application of blisters between the shoulders, and a plentiful use of squills. Some, after having been inoculated with the vaccine pock, caught the influenza; but neither complaint seemed to have been aggravated by the complication.

The epidemic, as it occurred in this city, may be properly enough divided into two varieties; the one a very mild, though often a tedious disease; the other a highly distressing, and sometimes a formidable malady. The former resembled in no small degree the common and usual effects of change of temperature on the human body; but the latter, particularly in its aggravated form, was, *toto cœlo*, a different complaint, and had nothing in common with catarrh, except the cough and coryza. In the one, lassitude, pains in the joints and muscles, frequent cough, unusual sensibility to cold, and some slight degree of a febrile state, were the predominant symptoms, but not so intense as to necessitate the patient's confinement to bed: in the other, the

the paroxysm of fever was similar to that of synochus or typhus, and could not be distinguished from them at the first onset. The patient, after a shivering fit, complained of sickness at stomach, frequently vomited, and threw up some bilious sordes, the bowels at the same time being attacked with a dysentric kind of purging, though sometimes they suffered severely from pain without any accompanying evacuation.

A cough seemed to be a necessary constituent part of the disease, and was seldom absent; and next to it in frequency of occurrence, were a severe pain in the forehead and soreness of the throat; bleeding from the nose was by no means rare, and I met with one case of it which endandered the life of the patient.

In the accounts of this epidemic already published, some have considered it as connected with debility, and others with increased systematic excitement. The truth lies in the middle between these two opposite extremes. The pulse was in general rather full, soft, and easily compressible, nearly similar to that of the bilious fever of this country in its earlier stage; I have witnessed many protracted cases without any striking mark of debility, and no tendency to putrefaction. On the other hand, it could not, in strictness of medical language, be denominated an inflammatory disease, as no instance of it whatever, unless mismanaged, in all my practice, demanded venesteeion; it is but fair, however, to acknowledge, that when appearances became alarming, they were very generally the consequence of an inflammatory affection of the lungs, superinduced by a heating and improper regimen, or by an unseasonable exposure of the body to cold, before recovery was complete. On these occasions the blood threw up as large a portion of coagulable lymph, and was as completely cupped as in genuine cases of pneumonia or pleuritis. The fever attending the influenza most commonly began to subside about the fourth or fifth day, but in many cases it was lengthened out to a period of seven, nine, or twelve days; and in this continued form, a delirium of the phrenitic kind was occasionally to be met with, which excited no small degree of interest and alarm.

In a small town, named Callan, within eight miles of this city, most of those who were attacked with the influenza had an eruption so exactly resembling the scarlatina, that it became a difficult matter to distinguish the one from the other, particularly from this circumstance, that an inflammatory affection of the uvula and velum pendulum

palati

palati was a constant attendant on this variety of the epidemic. An intelligent apothecary of the place, from the observations he had made, considered the eruption a critical effect, as he found that an evident change for the better was perceptible immediately on the eruptive matter being thrown out on the surface. I interrogated him minutely as to the existence of any other epidemic, more especially the scarlatina anginosa, and he positively affirmed that no such disorder as this had shewed itself in the town or neighbourhood thereof for several months past, but from the first appearance of the influenza he had met with cases of measles, and that it has from that period to this prevailed very generally all over the district.

The first and most essential step in the cure, according to my observations, was clearing the stomach and bowels by an emetic, and some gentle laxative medicine; after this it was usual with me to administer small doses of James's powder, washed down with a spoonful or two of the ammonia acetata, or a solution of some other neutral salt, every four or six hours, until some irritation took place in the stomach or bowels, or symptoms of convalescence began to appear. The urgency of coughing, and labour of respiration being so frequently combined, at first rendered me doubtful whether or no I should fly for relief to the use of the lancet. But a little time, and further acquaintance with the nature of the epidemic, tranquilised my mind on this point, and obliged me to abandon every idea of blood-letting, except in particular cases, where, from the previous condition of the lungs, or an ill-judged and unappropriate use of stimulants, such a measure had become necessary and unavoidable. In three or four instances of this kind, the utility of venesection was unquestionable, and the blood (as before observed) was equally buffy and cupped, as in genuine cases of inflammation of the lungs. Blistering between the shoulders was the remedy in general resorted to, when the breathing was oppressed and difficult, and it was found decidedly beneficial in removing this symptom, as well as the delirium which was constantly found to accompany it. When the delirium continued obstinate, blisters were applied to the legs and other parts, and the head was shaved and bathed with cold water and vinegar; but if these likewise were found to fail, recourse was had to laudanum, and most commonly with very signal success.

One of the most striking peculiarities attending this complaint, was the slowness with which almost every person,

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son, who was severely attacked, advanced towards recovery, the functions of the stomach continuing in a state of derangement, with symptoms of dyspepsia and hypochondriasis, long after the disappearance of the fever. The pulmonary organs in like manner remained a length of time delicate and irritable, suffering from the most trivial irregularity, or any sudden change of temperature in the atmosphere. There cannot be a doubt but it has laid the foundation of phthisis pulmonalis in many habits, particularly in those predisposed to this disorder. I have under my care this moment, three cases of it in the incipient stage, evidently originating in this source, and not the slightest tendency to pulmonary consumption appeared in any one of them previous to the appearance of the influenza.

81. Dr. Halliday, Belfast, May 30, 1803.

The influenza has been so slight here that physicians have not been much applied to on account of it. My own observations are too limited to be worth detailing, but sufficient to convince me, that however the disease may in some instances depend on the influence of the atmosphere, yet in the greatest number of cases I have met with, it could only be accounted for by the supposition of contagion. It prevailed very generally in Dublin several weeks before it appeared here. The first case we had of it, (as far as I can learn), was in a house, in which a Dublin gentleman was on a visit; two or three days after, two or three of the family became affected. Its progress in one house in the country, where I attended, was remarkable. Mr. P. and his family were first attacked, then the female servants, and after them the men servants; of twenty-one in that house three only escaped it. In another house, not far from that, not one has had the disease. In Belfast many houses have escaped; whilst, in many others, not one of the inhabitants has escaped. The medical men here have, in general, been exempt. In my own house it has not affected an individual.

82. Mr. H. Edgeworth, Edgeworth Town, June 19, 1803.

It was the expectation of hearing from Dublin that prevented me from writing sooner; but as such delay may be inconvenient, I send you the opinion of Mr. Dubourdieu, surgeon to the infirmary in this county.

He

He distinguishes the influenza from a common catarrh, by the suddenness with which a person is seized, the violent pains in the calves of the legs, muscular parts of the thighs, between the shoulders and back of the neck; pulse full, and difficulty of breathing very great. Great bleeding sunk the pulse considerably, but the breathing became more oppressed, and considerable debility was occasioned, which brought on delirium and often death, an instance of which happened yesterday; notwithstanding this, very gentle bleeding has been found of service.

All those who went to bed were seized with perspiration for twenty-four hours.

The influenza appeared here about three months ago; it appeared some time in Dublin before this period.

Although the air seemed infected with contagion, Dubourdieu is convinced that the influenza was communicated from one person to another. I have the same opinion from another practitioner in this neighbourhood.

It appears, as I suppose you have constantly observed, that those who died of the influenza, were those who were old and infirm, or the very young; and lastly, those who had some previous disorder.

The influenza is still prevalent in this country, particularly amongst the poor. I am happy to give you an instance, where the influenza was brought from Dublin by parcels, which were made up by a person very ill of that disorder, and sent to a lady of quality here. As soon as the parcels were unpacked, the person who unpacked them was first seized, then the lady herself, and the whole family were infected, as was the neighbourhood. The influenza seizes people more than once. I know of an instance where a person had it three times.

In a subsequent letter, dated Callan, July 19, Mr. Henry Edgeworth makes the following reply to my inquiries concerning the authenticity of the fact, related at the close of his first letter.

Respecting the influenza being conveyed by articles of apparel, I cannot vouch more for the authenticity of the fact, than that it was communicated by a letter from the lady herself, who lives nine miles from us, and also that it was the opinion of Mr. Dubourdieu, the surgeon, that it was from those parcels the persons who unpacked them received the infection.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Send you a few more Reports. I had good reason to expect information from remote parts of Ireland, which to me would have been exceedingly interesting. But public events will account either for delay or disappointment.

There is one request which I would beg leave to address to your Correspondents in general. This is to add to their other communications, of whatever nature these may be, the date of the rise, progress, and termination of the influenza, whenever they know it with tolerable certainty.

It is hardly necessary to state how a knowledge of its first appearance bears upon the most interesting question that can be started respecting this complaint. I shall have occasion to point out this at large, in a communication I mean to offer you for insertion next month.

I am, &c.

September 7, 1803. THOMAS BEDDOES.

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83. Dr. DAVIES, Carmarthen, July 21, 1803.

The influenza appeared at Carmarthen, and the neighbourhood, about the latter end of February, and continued until about the middle of May.

Although it appeared general, yet many, very many, escaped it.

It did not appear to me to be contagious. In my own family it clearly was not so, nor do I consider that it was so in this part of the country.

Its attack commenced with violent head-ach, pain in the limbs, a prostration of strength, pain in the chest, with cough, very violent in some instances, and the expectoration often streaked with blood. Hæmorrhagies from the nose were not unfrequent. In some cases a violent ear-ach, and in many, abscesses formed in the ear. In two patients, ulcers of a very fœtid kind appeared in the mouth.

The pulse was quick, the thirst great, and the respiration in some remarkably oppressive.

I did not observe any peculiar foulness in the tongue.

Delirium often attended these symptoms, especially in old people. In one case (a gentleman of 76) the delirium continued six or seven days; I considered it to be the effect of debility.

I found

I found in this complaint the cascarilla bark of infinite service. The Peruvian bark, certainly, did not appear to me generally to agree. I gave the cascarilla bark after the second or third day, and with unquestionably good effects.

Where the liver was previously affected, the recovery was uncommonly slow, and lingering. In one or two instances ascites followed.

In all the observations that I made, (which embraced a practice of nearly fifty miles) the effect of the influenza appeared to be extreme debility, and the recovery from it in a most remarkable manner slow and tedious.

In a gentleman of sixty-five, paralytic symptoms showed themselves, and the whole terminated in a mortification of the feet, and death. The mortification of the feet shewed itself about a month from the first attack. The patient was of a thin spare habit, and in good health before the influenza attacked him. The paralytic symptoms appeared chiefly to affect the muscles, the throat, &c. This is the only fatal case that came within my knowledge.

I treated the coughs in their usual manner with blisters, &c. always having in view the support of the general strength. I did not bleed in any case.

84. Mr. Melhuish, Tiverton, August 18, 1803.

The influenza first appeared in two of my patients, one of which resided in this town, and the other about a mile south-east of Tiverton, on the 23d day of March last.

This disease, after having been very general about a *month*, subsided almost immediately after the change of the wind from the east (in which quarter it had generally been from the time abovementioned) to the west, and the subsequent rain, without recurring in any single instances.

It appeared to me as uniformly endemic and sometimes epidemic.

I recollect the former influenza some years since, which seemed a compound disease of catarrh and peripneumony, the first rather predominating; in the late disease (in my opinion) a compound disease also of peripneumonia notha, catarrh, and sometimes inflammatory sore throat; the peripneumonia notha was most predominant. An intermittent tendency was also *very* observable in some instances, but it never continued so as to require the use of the bark.

I found the pneumonic affection in this disease infinitely less dangerous than when the peripneumonia notha is less frequent, for though three instances in this neighbourhood occurred where two in each house died, yet these were old persons,

persons, or of very bad stamina, and in a bad state to meet the influenza. Upon the whole, I found it *much* less dangerous than from the severity of the symptoms I had first apprehended.

I had only two cases in which I bled, in one of which the patient was accustomed to bleeding every spring; the other highly plethoric; but each recovered.

I treated the disease exactly as peripneumonia notha, except that opium at night, which I have so often given with the greatest success in this disease, unfortunately had generally a contrary effect in the influenza.

85 Dr. Grant, Waterford, July 20, 1803.

As I kept no diary during the prevalence of the influenza, I send what I can recollect.

It was very general here from the beginning of April till the middle of May, but though you could meet few in the street who did not complain of it, as if it were the fashion, very few were so ill as to require medical attendance, nor did I learn that any one died of it here.

It was not contagious, as in several families where I attended not more than one or two were affected. It ceased, as well as I remember, when the weather became *settled* warm.

It was the same through the country round.

The symptoms I met were shivering more or less, a sense of tightness and oppression of the breast, a small cough, and sometimes failure of the voice, a thin discharge from the nose and eyes with great complaint of weariness, particularly of the loins; the treatment I used was antiphlogistic regimen, keeping the belly free with neutral salts.

86. Dr. Ryan, Kilkenny, July 28, 1803.

The first time I was called upon to visit a person ill of the influenza was on the 9th or 10th of April, and my conversation with the gentleman took place the day after. As you know I have already alleged that it was in consequence of this conversation, I pronounced my first patient to be ill of the epidemic, and I can positively assert I proclaimed its existence in this town at a time when no idea whatever was entertained of such a troublesome visitor having got footing amongst us; however, I will not take upon myself to declare that this was in fact the first case that appeared.

Relapses were so frequent, and the reliques of the influ-

enza so completely resembled the original, that it is extremely difficult to ascertain the precise period of its complete extinction, though I think I can speak with confidence as to the time it began to take flight. I was particularly careful to insert the day of the month I commenced and ceased my attendance on every person of consideration during the prevalence of this disorder; and from this registry it appears, that about the latter end of May, or the beginning of June, its violence so completely subsided as no longer to excite any interest or alarm.

I enclose you Dr. Grant's letter, upon which it is necessary however to remark, that the intercourse between this town and Waterford is by an indirect and circuitous way, while that between Cork and Dublin is direct and constant, a mail-coach from each of these cities arriving here every day in the week, so that supposing the disorder to be infectious, and to prevail equally in the three sea-port towns at the same time, it is extremely improbable indeed that the contagion could be received from Waterford so early as from Cork or Dublin.

The features and character of the epidemic did not appear to me to be influenced by the weather, nor was there any striking difference to be observed between the influenza which was to be met with in the town and that in very distant country places. Individuals indeed on recovery suffered severely at times from north-east winds, by exposing themselves too soon and too incautiously to the open air.

87. Dr. Kinglake, Taunton, August 6, 1803.

The first instance which occurred in my observation of the late influenza, was about the middle of February; the last, at the beginning of June, though it is reported to have had both an earlier and later existence in this vicinity.

Its prevalence in different places was not simultaneous, it proceeded desultorily in some cases, in others it was more regularly progressive.

After it had attained its height, or greatest frequency, it continued to shew itself in single instances during several weeks, more particularly towards its termination.

Well marked examples often presented of its personal communication. It occurred to me often to remark, that when the disease had been unduly protracted, and had proved unusually violent, that those who were most occupied

pied in the care of the patient, successively suffered. This fact was so striking, that it soon confirmed me in the propriety of analogically extending to the disease, my *general persuasion* of all morbid action being more or less contagious, according to the degree of the malady, personal proximity, existing temperature, and temperamental susceptibility for diseased impression.

The influenzal disorder (as in every other instance of epidemic affection) probably had its source in the noxious influence of variable temperature, deranging the due distribution of the circulating fluids, vitiating the various secretions, and distempering the healthful conditions of vital motion, from whence generally resulted inflammatory determination to the mucous membrane of the trachea, bronchiæ, fauces, and nostrils, which became sympathetically diffused over the system, in the form of febrile affection.

The disease appeared to have had this catarrhal origin, and generally the catarrhal form. In some few cases its pressure was concentered on the intestines, when it exhibited the strict character of enteritis; in others, bilious suffusion gave it an icteric complexion.

It was purely inflammatory; it speedily, and under my direction, almost invariably yielded to reduced temparature, administered by atmospheric exposure, copious dilution with cold water, and the rigid avoidance of dietetic, medicinal, and mental stimulants.

The want of universality in its personal contagion is no valid objection to its infectious nature. A variety of circumstances must concur to give effect to contagious power. Adequate virulence, suitable distance, and above all, an apt state, or susceptibility for morbid impression, must present, to render the communicable quality operative.

No greater difficulty occurs in explaining the numerous exceptions and anomalies, in the agency of personal contagion, than in those of atmospheric infection; in both, they are equally referable to concomitant circumstances, which widely modify the influence, but do not annul the specific power.

In short, my opinion is, that the late influenza (in common with every variety of epidemic disease, not excepting even the plague, originated from the morbid influence of variable temperature, by which the salutary conditions of vital motion became at length so distempered, as to genarate and evolve from every part of the system an *halitus*, or *materies morbi*, proving infectious or not, according to its degree of concentration, and the existing temperamental

X 2 aptitude

aptitude for being impressed by it. In many instances it may be efficient, while in others it may be quite inert. A similar operation of cause and effect, obtains in every description of disease that disturbs vital motion sufficiently to vitiate its salutary processes or functions.

The principle of contagion, consisting of a specific arrangement of matter, issues from every conceivable disease, but it amounts to operative force in comparatively few instances.

It may be fairly questioned, if the atmospheric air is susceptible of any condition but that of temperature, that could be generally active in the production of disease. Neither its mechanical impregnation with noxiously stimulant substances, whether in the form of miasma or animalcula, nor any chemical combination of its constituent principles in unnatural and deleterious proportions, could be admitted as efficient causes of epidemic diseases, consistently with the original mildness, gradual aggravation, limited extension, and personal communication of the morbid influence.

These hurtful agents must necessarily be too insulated for general diffusion, nor could their universal influence be compatible with animal existence.

Various remote causes may engender individual distempers, but these will not become general or epidemic in the multifarious dissimilitude of temperamental susceptibility, without the agency of specific matter, combined and combinable only by the peculiar affinities of *animal chemistry*. It does not appear that the late influenza was distinctly communicable by clothes or fomites. Its contagious quality did not seem to be sufficiently powerful to impart diseased impression, but when applied in the full force of direct personal transference.

83. Mr. Bartley, Nailsworth, Gloucestershire, August 26, 1803.

In regard to your queries respecting the influenza, I will endeavour to afford you all the information on the subject within my power of communication, which I fear is but little. It commenced here in the beginning of March, about which time I attended a gentleman who was, I believe, the first in this neighbourhood who was attacked; a very short time afterwards, I became myself the subject of the disease; the symptoms of which I will briefly recount as they occurred to me. I first experienced a very unpleasant

pleasant and painful sensation, as though gravel or some other extraneous matter was introduced between the globe of the eye and eye-lid. Considerable redness in the eye, impatience of light, and a profusion of tears soon followed. This was shortly succeeded by a great discharge of mucus from the nose, of so ichorous a quality as to excoriate the parts over which it passed, accompanied with violent pain in the head, slight cough, chilliness alternating with heat, pain in the back, and oppression at the præcordia. Appetite very much impaired, and debility excessively great. Every symptom increased in the evening; sleep was constantly interrupted; and during the two or three first nights, my imagination was so confused and bewildered as almost to approach delirium. Bowels costive; urine high coloured, small in quantity, and from its heat occasioning much pain in the discharge. After applying a vesicatory inter scapulas, the inflammation of the eyes subsided, and in about four days the febrile symptoms disappeared, but I experienced for some time afterward increasing debility, and an inconceivable, insurmountable dejection of spirits, with frequent nausea, and great disinclination to food. Becoming at length convalescent, I attended several persons in the same complaint, and soon after suffered a relapse nearly as violent as the first attack, save that the inflammation returned in the left eye only, which I relieved by keeping up for some time a discharge from a blister on the adjoining temple. Whether, in the first instance, my disorder proceeded from epidemical influence of the atmosphere alone, or not, I will not pretend to determine; but in the second, I am persuaded it was the effect of contagion, and was by that means communicated to every person composing my household; and I have constantly observed, that in houses where the disease made its appearance, all the family have in turn been the subjects of it, and other families, who avoided communication with the sick, wholly escaped the disease.

It may be useful to remark, that in no two persons I have observed precisely the same symptoms. Some, in addition to those I have enumerated, were troubled with a *violent* cough and excessive pain at the sternum, which commenced in the incipient stage of the disorder, in which cases the disease terminated with a profuse expectoration of high coloured yellow mucus, not frothy, but resembling pus in its appearance, and of a disagreeable odour, "sui generis." In others, it commenced with vomiting; every thing taken into the stomach was speedily rejected, which

in general relieved the head, abated the febrile symptoms, and induced a quicker termination of the disease. In others, there appeared symptoms of pneumonic inflammation. In others, cynanche tonsillaris. Many were affected with obstinate costiveness, whilst others laboured under profuse diarrhœa. The pulse in general was frequent, but not hard. The tongue, in many instances, white in the middle, but red round the edges, and covered with florid papillæ; but in some cases it exhibited no unusual appearance. The disease in general terminated about the fourth or fifth day, but in aged and infirm patients, it was much protracted; the debility was consequently greater and of longer continuance. I have found the disease fatal in one instance only, where it was succeeded by hydrothorax, which has terminated in death. It disappeared in general here about the latter end of April, but there were a few solitary instances of its re-appearance in remote situations, and, as I think, communicated by fomites.

I shall venture still farther to intrude on your patience by relating my plan of treatment, which, of course, varied as much as the symptoms. In the commencement of the disease, I have generally exhibited (particularly where nausea has existed, in which case a vomit was usually previously administered) a saline mixture in a state of effervescence, with a few drops of vin. antim. tartaris. or aq. ammon. acet. with mist. camphor. which, together with a strict observance of an antiphlogistic regimen, contributed to abate the pain in the head, and also the febrile symptoms. To obviate costiveness, cooling laxatives were administered occasionally, such as infus. tamarindorum cum senna, &c. I did not attempt to check diarrhœa where it appeared during the height of fever, but when that subsided, a small dose of tinct. opii has usually moderated the discharge. Where there appeared to be pneumonic inflammation, I did not hazard the use of the lancet on account of excessive debility. A vesicatory applied to the affected part, constantly relieved the pain, and produced the desired effect. I did not venture on the use of opiates until the disappearance of fever, when a little tinct. opii camph. with lac. ammoniaci and oxymel scillæ has been useful in allaying the cough and promoting expectoration. As the great subsequent prostration of strength indicated the use of corroborants, I exhibited the tonic bitters and steel with much advantage, and in some cases where cough was not present tinct. cinchon. comp.

I have, I doubt not, been unnecessarily prolix on the subject,

subject; nor have I replied to your queries in the order they are proposed, for this I solicit your excuse, as I have not at present, time for revision. You will be able to perceive at least from what I have stated, that I am decidedly of opinion, that the disease may be communicated by infection or fomites, and that it essentially differs from common catarrh. If the incoherent observations I have made can afford you the least possible satisfaction, it will abundantly gratify me.

89. Mr. Hugo, Crediton, August 10, 1803.

The first appearance of the disorder in this neighbourhood which came under my observation, was on the 22d of March, in the family of a gentleman who resides about three miles *west* of this town. He had been attending, with his lady, the assize at Exeter, the whole of the preceding week, at which time the influenza was very general there. They came home both ill of the disease. On the next day, the servant who returned with them, was seized with it, and by the 25th, it had been communicated to every other person in the house. Some labourers, who reside at an adjoining farm, were affected about the same time; but a woman who had been employed at Exeter, was the first attacked by it. It appeared very soon afterwards in the town of Crediton, and here also the first case I visited was a gentleman who had been attending at the assize. It spread very rapidly, and in a short time became general in the town and adjoining villages; its duration as an epidemic, was from the 22d of March to the end of April; it was afterwards only occasionally met with.

The symptoms and mode of treatment were so similar to those which are commonly described, that it is unnecessary to enumerate them. Very few fatal cases occurred, and they were all persons in advanced life, where the disease was accompanied with peripneumony of the low typhoid kind.

From the manner of its commencement and progress here, I can scarcely doubt its infectious nature, and believe it to have been brought into this town by persons who received the contagion at Exeter. It is scarcely credible that any miasmata floating in the atmosphere, can be carried in a direction different from the current of air existing at that particular time, which was far from being the case in this instance, or that it can be conveyed to a distant situation without producing its effects also on some part of the intermediate country; yet the last place in this neigh-

 bourhood

bourhood which was visited by the influenza, is a village situate at least six miles *eastward* of the house where I first observed it. It appears also that though the contagion on a large scale proceeded, in this part of the kingdom, from east to west, when considered with respect to particular situations, its course was by no means so regular, but seemed to depend rather on the degree of intercourse which subsisted between the uninfected and those who were ill of the disorder. In fact, I consider it as an epidemic, spreading in the same manner, and proceeding in the same course, as those diseases which are indisputably contagious.

The principal reason for referring it to an infected atmosphere, seems to arise from the circumstance of a large number of persons being seized so nearly at the same time; but if we reflect that the disorder when mild so much resembles a common catarrh that the patient does not submit to confinement, but mixes unreservedly with his neighbours, and also that the febrile action probably takes place within a short time after the contagion is received, there will be little difficulty in reconciling it to the same laws on which every other infectious disease is communicated and depends.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AFTER a thorough investigation of the opinions adduced, respecting the disease, *entitled* Influenza; when a majority amounting to nine-tenths of the medical world are agreed with respect to its non-contagious nature, all controversy should now cease, as it is certain that the proof, though not positive, is sufficiently presumptive. As there has been diversity of opinion concerning its nature, so have there been different rules laid down for its cure. Some condemn the use of the lancet, asserting that phlebotomy is extremely pernicious, whilst others declare that a contrary practice has been, in certain instances, fraught with the happiest effects.

It fell to my lot, from having been appointed to attend the paupers of the outer and inner parish of Romsey, to see much of the prevailing epidemic; and if the following observations should tend to elucidate the subject, my trouble in drawing up this statement will be amply compensated.

I am

I am of opinion that the remote causes of this disease originated in the sudden change of atmosphere, which we experienced in this county; a change, I believe, generally felt throughout the United Kingdoms, as well as upon the Continent. As I kept no meteorological diary, the facts relative to the weather are deduced from my memory. The heat during the greatest part of the days in the latter end of March and beginning of April, was such that few people ever before endured at that season; its approach was as sudden as its departure, not giving the constitution an opportunity of accommodating itself, either to the expansion occasioned by the heat, or the stricture produced by the cold. If the above plain statement be correct, we may save ourselves the trouble of ransacking the bowels of the earth, or of darting with microscopic eye into the insect kingdom, to discover what seems to have perplexed our great philosophers.

I myself had the prevailing epidemic, which I attributed to taking too much exercise during the warm unseasonable weather, and not to contagion; for had the complaint been infectious, Mrs. C. and the rest of my family would surely have suffered from it. I was very ill four or five days, but not so as to prevent me from attending my patients. I was first seized with considerable pain of my head, a sense of languor and debility, heaviness of my eyes; at times I felt a sense of chilliness. I here wish to observe, that I conceive this complaint to be very different from catarrh, for neither in myself nor any of my patients, did I observe any affection of the mucus membrane of the nose, or watery eye, so commonly noticed; by taking a calomel purge, using pediluvium, and washing down a bolus pulv. antim. gr. v. opii gr. i. with white wine whey, and by perseverance in the bolus and whey for three nights, I found myself in a convalescent state; but my head for a fortnight or more, on the slightest exertion, was subject to pain and throbbing, something like palpitation, which I attributed to a state of atony in the system, and consequent increased vascular action. By way of divesting my brethren of prejudice with respect to bleeding in this disease, I have to observe, that the case of a patient, 61 years of age, ranked with the worst that came under my care. This old man was severely affected with the prevailing epidemic, and I have reason to think, if the dictates of timidity had influenced my conduct, he must either have died, or lingered out the remainder of his days in that distressing malady phthisis pulmonalis. He was at first taken with all the usual

usual symptoms in an aggravated degree; the pyrexia, languor and debility were great, dyspnœa and painful inspiration intolerable; he complained of a stitch and tightness across his chest, so that, to use his own expression, there was not room for the air to descend into his lungs. His pulse though frequent, was small and tremulous, his debility such that with difficulty he could raise his head from the pillow. The treatment of such a case required time and consideration, yet there was not a moment to be lost; something was to be done, though not rashly, for without relief death appeared certain. The candid reader will easily conceive the difficulty and dilemma attendant on such a case; his debilitated state, his tremulous, quick, and weak pulse, according to some people's theories, forbade the use of the lancet, particularly in this disease, yet I bled him, and to the amount of ten ounces; though the blood did not flow from a large orifice, or quickly, yet I never in the whole course of my practice beheld so much coagulable lymph as presented itself to my view the next day; it was truly a buffy coat, not many degrees removed from the nature of a bull's hide, and considerably thicker; it constituted a third part of the crassamentum covering its whole surface. The patient's bowels being constipated, I deemed it necessary to give him a calomel purge, which operated very freely, yet after these evacuations the stitch and tightness still continued, and in less than twenty-four hours I repeated the bleeding to the same amount, and blistered him; the buffy coat did not occupy so large a space, nor was it near so thick. By observing the antiphlogistic plan, by giving small and repeated doses of soda nitrata, with the addition of a small quantity of antim. tartar. the violence of his complaint began to subside; after which, by the administration of gentle anodynes conjoined with tinct. scillæ, he began to expectorate, and his recovery after his pulmonic complaints ceased, was expedited by the exhibition of tonics. Two other cases of a similar nature yielded to the same plan of treatment; one of them a poor hard working man, from the violence of his pectoral complaints, nearly fell a victim to phthisis pulmonalis; for several days this patient's expectoration was so excessive, that he filled a pint pot with mucus of a purulent appearance, though I did not subject it to the test of experiment, knowing that common tests are as uncertain as they are fallacious; he had also colliquative night sweats, frequent and small pulse, and a constant pain in the head. I here had an opportunity of trying the effects of Dr. Magennis's favourite remedy

medy, tinct. digitalis saturata, beginning with small doses, and increasing them gradatum; and I must candidly confess it appeared to succeed and answer my most earnest expectation; the sweating gradually left him, the expectoration began to diminish, and the cure was completed by means of decoct. cinch. flavæ cum acido vitriolico, q. s. ad gratam aciditatem. The success of this practice, unadorned with any fluctuating theory of this epidemic with the fine name of *influenza*, is sufficient to enable me to assert that it is by no means a fatal disease, for I did not lose a patient notwithstanding I bled; yet I do not wish it to go abroad, that because I adduce an instance or two of the success of this practice, that I conceive it to be always necessary; by no means, for I would have quite the reverse to be understood, as I met with many cases that would not bear bleeding; and I must observe, that much must ever be left to the judgment of the practitioner, and that his opinion should not always yield to the dogmatical dictates of medical authors, of whom I think Cullen, in point of *good sense, candour, modesty*, and practical knowledge, deservedly holds the pre-eminence. I am afraid I have trespassed too much on the limits of your excellent publication, for in works of this kind people should consider that by being too diffuse on some subjects, others, as worthy and instructive, may be lost to the public: Yet I cannot close this essay, without animadverting on Dr. Magennis's account relative to the plan of treatment adopted by a naval surgeon in a ship of war; his observations may be ill timed, nay even unjust, for the censure which they seem to convey may be unmerited. What necessity was there for having mentioned the name of the ship? The characters of men in public situations should be delicately handled; and extremely glad shall I be, if the statement of my cases should tend to exculpate the surgeon, or wipe off any stain that may attach to his character: for it is evident, whether censure was intended or not, that the world does not always construe things in the most charitable way. I have no desire to wean gentlemen from their own opinion, *sed quod vidi ad scripsi.*

Romsey, Hants,
August 10, 1803.

I am, &c.
RALPH CUMING.

A CASE

A CASE *of* COMPOUND FRACTURE; *communicated by Mr.* C. SIMPSON, *of Skipton.*

MR. EVANS, æt. 46, of a very irritable habit, had the misfortune to fracture his leg, by a fall from a causeway, on the 8th of April last. The family surgeon was immediately sent for, who laid the leg extended upon a pillow and applied a solution of the aq. acet. lyth. by means of linen cloths. Considerable swelling of the whole limb, with violent pain and starting, came on the following day, which continued to increase until the 13th, when I first saw him. I found him in the following condition: Pulse 130, very weak and fluttering, tongue covered with a dry brown fur, constant low delirium, skin hot and parched, bowels regular, urine of high colour without sediment, and small in quantity; particular wild look, picking the bedclothes; the leg and thigh greatly swelled, of a livid colour, soft and flaccid, so as to retain the impression made by the fingers; a great number of vesications, full of yellowish ichor, surrounding the fractured part; the broken end of the tibia protruding without the skin two inches; very restless, and with great difficulty kept in bed. I immediately laid the patient upon his side, with the knee bent as much as possible; after moderately extending the limb, the protruding end of the bone disappeared; it was then laid upon an even pillow with a splint under it, and sprinkled over with crude sal. ammon. in fine powder; afterwards covered with a large stale beer poultice, in which was mixed a portion of the same powder; the bed, &c. being adjusted, a person was directed to sit by the bed side to keep the knee steady, and the following powder to be given every two hours, well mixed in a little gruel:

℞. Mosch. chin. camph. aa. gt. xv. ammon. pp. gt. x. m. ft. pulv. and washed down with three table spoonsful of the following mixture:

℞. Confect. arom. ʒiiß. sp. cinn. sy. com. aa. ℥j. tinct. opii gt. xc. aq. puræ ℥vj. m. ft. mist. Gruel, with a good portion of red wine to be given as diet, and when thirsty to have a little wine and water.

14th, mane. A few hours after I left him last night he became quite furious, rose up in bed, tore the poultice, &c. from his leg, and on my arrival this morning, one o'clock, found him sitting upon the edge of the bed with his leg hanging down, and the end of the bone pushed out as before; the colour changed to a much darker hue, with every

every other symptom of the rapid approach of mortification. I again replaced him in bed, bent the knee, and reduced the protruding bone as before; then applied the powdered sal. amm. and poultice, as usual; also, a broad belt over his breast, and firmly fixed down to each side of the bed, and gave him gt. lx. more of the tinct. opii in a dose of the cardiac mixture, and directed the powders, &c. to be regularly continued.——Vespere. Had a few hours sleep after I left him this morning, during which a profuse perspiration broke out, which continues; the delirium yet present; pulse 120; of better strength, tongue a little moist upon the edges, urine in much larger quantity; starting of the limb not so frequent; wound made by the bone filled with a black slough; no more vesications; swelling much the same; has taken his medicines well; much better to manage since the application of the belt. The wound to be dressed with the ung. res. flav. and a little of the bals. canad. mixed with it, and applied warm: two ounces of strong camphorated spirit to be applied over the whole of the limb, afterwards the powdered sal. ammon. and poultice as before; the dose of the musk and camp. to be increased to ℈j. each, with the amm. ppt. and cardiac mixture as usual; likewise to have a draught with 50 drops more tinct. opii, h. s. and a large blister to be applied between the shoulders.

15th, mane. After a sound sleep of six hours he awaked perfectly sensible; pulse 86, of good strength, perspiration copious; considerable quantity of loaded urine made since last visit; tongue moist, little or no thirst; the bulk of the leg greatly diminished and of a much brighter colour, a slight redness appearing round the edges of the wound; complains of smarting sensation when the camphor is applied; has taken medicines regularly; blister rises well; no stool since the 13th. The powders and mixture to be discontinued, to have a solution of the neutral salts, with an infusion of senna; the wound to be dressed as before, and poultice changed for white bread and milk.—Vespere. Has had two stools from the solution, leg perfectly easy, and remains in a good position; swelling continues on the decrease; in good spirits, pulse 80, perspiration more moderate; a little matter discharges from the wound; to be dressed with balsam and poultice as before; to have a solution of cream tartar. for common drink, and a draught at bed time with 40 drops tinct. opii.

17th. Continues convalescent; wound discharges freely; an eighteen tail'd bandage applied, with another long splint

splint upon the inside of the leg; to have a nourishing diet with a pint of red-port daily, the leg to remain in a relaxed position.

June 14. Until this time has continued to recover daily; the wound discharged freely until the slough digested out, afterwards granulated and healed in the most favourable manner; is now able to walk a little upon crutches.

July 22. Is now able to walk with the assistance of a stick; the leg equally as straight and of the same length as the other.

If the favourable termination of this case lead to a further trial of the conjoined use of *large doses* of musk, camphor, opium, and ammonia, together with the external use of crude sal. ammoniac, and with similar effects, I shall consider myself highly gratified: there cannot be a doubt of the mortification here being arrested by steady perseverance in the above plan, assisted by strict attention to the relaxed position.

The whole limb exhibited every appearance of gangrene, having actually taken place when I first saw him, which demanded the most active and speedy treatment, and which hurried rapidly forward before the medicines could arrive, being seven miles distant from my place of abode, I consider *musk, opium,* and *ammonia,* the sovereign remedy in those cases, provided they be given *in full doses,* and at *short intervals.* Nothing can more completely contradict the impropriety of tight bandages in all cases of fracture than this. Mr. Corner, the gentleman first called in (since deceased) applied a circular linen roller firmly round the fractured part, afterwards the solution mentioned. To the tight application of the roller, the extended position the limb was kept in, and the patient's habit of body at the time, I attribute the attack of mortification.

August 4, 1803.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

HAVING observed in the Medical and Physical Journal, for last month, the paper of M. Dumas on the cause of hunger and thirst, I am induced to transmit to you the following observations.

A person

A person was seized, after a long confinement, with great anxiety, debility, and complete loss of appetite, which lasted for about four days, accompanied with thirst, and a failure of the saliva. During the second night, having sucked an orange, in order to remove the disagreeable dryness occasioned by the want of the saliva, he next day felt nausea and oppression referred to the stomach, which induced him to empty it, by irritating the fauces, about eight hours after the orange juice had been taken. I was much surprized to find it after that stay on the stomach, unaltered and unmixed with any other substance.

It would appear from this case, that the failure of the appetite for food is connected with a want of the gastric fluid. It was evident that there was nothing in the stomach but the orange juice, which had undergone no change; doubtless, because there was no gastric fluid present.

We must infer from the experiments of Spalanzani, Dr. Stevens, and others, that the gastric fluid is the means of effecting that change which the food undergoes in the stomach; and does it not seem probable, that the sensation of hunger may arise from the action of this fluid on the stomach, and that the absence of the gastric fluid is indicated by a want of appetite, a provision of nature, which prevents our eating at a time when no digestion can take place, by which we should only excite repeated vomiting, without receiving nourishment?

If these observations are just, we may, it would seem, by emptying the stomach of its gastric fluid, at will destroy the appetite; but it is difficult to empty the stomach entirely of the gastric fluid, both because it is difficult to empty it entirely of any of its contents, and because the very act of vomiting, excites it to pour out a fresh quantity. That the appetite, however, can be nearly destroyed, and the sensation of hunger almost entirely taken away, by removing the gastric fluid from the stomach, appears from the following experiment.

A person, in good health, having fasted for seventeen hours, and still further increased the appetite by exercise, instead of satisfying it, by means of warm water, repeatedly excited vomiting.

The water returned clear, and only mixed with a ropy transparent fluid, such as the gastric fluid is described by Spalanzani, or as I have myself procured it from the crow, so that there had been nothing in the stomach but the water and the gastric fluid, which, like the water, was without

without taste, smell, or colour. By this operation the hunger, which immediately before was urgent, was wholly removed, and rather a disgust to food produced, which was sensibly felt on seeing others eat. A small quantity of food satiated even to sickness, which continued for some hours, attended with a sense of oppression referred to the stomach.

Do not these observations seem to warrant the opinion, that the presence of the gastric fluid in the stomach, without such substances as are fit for combining with it, and thus destroying its activity, is a principal cause of death from hunger, for anorexia we have seen is occasioned by the evacuation of the gastric fluid, and we know how long people labouring under anorexia, however excited, will live without food?

The speedy acidity which took place in this experiment is remarkable. Although the stomach, as appears from the state of what was thrown up, was free from every fermenting substance, yet the food which was taken (bread and milk) acquired acidity in a quarter of an hour, indicated by acid eructations.

Does it not appear from this experiment, I may ask by the bye, that a diminution of the due quantity of gastric fluid is at least one cause of dyspepsia? Is it not probable that in such, perhaps in all cases of dyspepsia, the symptoms may be mitigated, perhaps removed, by supplying dyspeptics with the gastric fluid of those animals whose food is most similar to that of man? This I was led, from much consideration, to propose in a Treatise published eleven years ago. In a Thesis published at Edinburgh several years after by Dr. Scot, it is observed, that an Italian physician finding every thing else fail in a dyspeptic case, had recourse to the gastric fluid of brutes, which proved successful.

To return from this digression, with respect to affections of the mind removing the calls of hunger, do they not occasionally abstract our attention from all other sensations? I believe the appetite will always be found to return on the tranquillity of the mind being restored, except in debilitated habits, where the power of the gastric fluid is much impaired. The want of appetite in fevers, where the supply of the gastric fluid, as well as of other secreted fluids, fails, farther strengthens the foregoing observations.

With regard to thirst, it seems to attend all cases of diminished secretion in the alimentary canal, whether there be

be a deficiency of watery fluid in the blood or not. There is no such deficiency in the commencement of fevers, and in dyspepsia.

I am, &c.
A. PHILIPS WILSON.

Worcester, Aug. 14,
1803.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

YOUR attention to my former papers, encourages me to solicit a place in the Medical Journal for the following Observations, as I think it of importance to the public to state, (in reply to that part of Mr. Ring's letter, wherein he says, the disease from my mode of inoculating, is more violent than by puncture) that I have never experienced a *single* instance of severe inflammation, but the contrary, and on that very account prefer using the quill, even when I have recent matter.

Within the last fortnight I was requested to visit a child in this neighbourhood, who had been inoculated at the Institution in Salisbury Court, by puncture; I understood the inflammation had been very great, but I was called in to examine the glands of the axilla, which were much enlarged in consequence; such a circumstance I had never before seen from vaccine inoculation. With many, I fear, I may be thought too partial to my own mode, but trust it has arisen from the best of all conviction, that of *experience*; not only in this, but the variolous also; and I hope it will not be thought irrelevant to the present subject, if I mention that this was *one* particular of my plan formerly alluded to, as I will state what gave rise to my practice.

In the beginning of the year 1786, great numbers failed with the natural small pox at Brighton, and a meeting of the inhabitants was called in consequence, to consider the propriety of general inoculation. At this meeting my father was requested to attend, and after the resolution being formed of carrying it into effect, he sent in the night an express for me, (sixteen miles) to desire I would bring all the

preserved matter by me, and also to charge as many quills as I could, and bring with me by day-light; this I did, to the amount, as I should suppose, of about sixty. Two patients, with good distinct eruption, were put into a chaise and sent from our receiving house after me. As soon as I arrived at Brighton, I began inoculating some particular families we were well acquainted with, until all the matter thus taken was used; the rest of our patients, amounting in the whole to 725, were inoculated from the two patients above alluded to. The names being all taken down as inoculated, it was impossible I should be mistaken as to those who had the dry matter used; and when the time of eruption arrived, I could but remark the general mildness of the *first* inoculated, compared with the others; this, and some other particulars I then noticed, but conceived it might have arisen from the hurry of inoculating, by inserting the matter too deep, and using too much; or from the blood being heated by standing for a long time in the room, which was crowded all day; future experience explained the real fact, but I believe most of your readers will excuse any farther particulars on this head. I shall leave the physiologist to explain how this may happen, but have always considered that variolous matter, when inserted by puncture, and in the fluid state, to partake more of the natural infection. I agree perfectly with Mr. Ring as to the impossibility of communicating diseases with the blood, but at the same time we meet with so many parents (and those well informed) who do believe it, and even insist on seeing the person the matter is taken from, that I never use the quill for more than one, though two or three might be inoculated when well charged.

The Report of Mr. Ricards, in the last number, gives me an opportunity of bearing testimony to his statement of the very beneficial effects from the fresh powder of sabine in syphilitic warts. I generally use it mixed in saturnine ointment; I have also made a tincture of it in aq. ammon. pura, and found it to answer better than any other application for the common warts of the hands.

Soho-Square,
August 14, 1803.

I am, &c.

C. DENNETT.

OBSERVATIONS

Observations on the Use of Gelatine in Intermitting Fevers; *by* M. Gilbert. *Read at the Medical Society of Paris, March* 18, 1803.

An ingenious theory led M. Seguin to the medical use of gelatine; he thinks, that what he calls the febrile matter of intermitting fevers, is decomposed by the gelatine, in consequence of which he instituted many experiments, the result of which has confirmed him in this theory. The object of the author of this paper is to offer to the Society an observation which he followed through all its details, and which, he thinks, leaves no doubt whatever of the efficacy of this new remedy in the disease in question. At present a number of persons, nominated by the National Institute, are occupied at the Hospital of the Medical School, in researches on the administration and effects of gelatine, and the author wishes to second the efforts of the Institute by those observations which his particular practice has afforded. The author tells us, that he made his first trials at the military hospital of Val-de-Grâce, and he found that the immediate effect of taking the gelatine before the cold fit, was, to moderate in a remarkable manner its intensity, and to render the access in general more mild. He further observed, that it produced, in many persons, a diarrhœa more or less considerable; and here closed the author's enquiries. The difficulty of restraining military men in hospitals, the dislike to persevere a sufficiently long time in the use of medicine, and the want of exactness on the part of the patients in following his prescriptions, prevented him from offering to the Society, the facts which he had remarked in the hospital. He preferred to draw his conclusions from those cases which his private practice offered, as affording more certain and sure ground for observation.

The following case is intended as an illustration of the good effects of gelatine: A woman, aged forty-seven years, thin, and of a delicate constitution, and whose general appearance manifested an irregular digestion, and imperfect biliary motion, by profession a cook, was attacked in the month of September last, with a double tertian fever, which at the end of six weeks weakened her considerably; the shivering fits were long and violent, parching heat, an obvious biliary irritation; the access came on at the distance of twelve hours, repeated every day, but the fits were less

strong

strong every other day; such were the circumstances which led the author to fear the fever might change to a bilious remittent. The woman lived in the village of Sceaux, near Paris, where this fever wore an epidemical appearance, but seldom proved fatal. After emptying the stomach, the author administered the bark in substance during fifteen days, in consequence of which the fever disappeared, and the patient's health returned. Towards the end of February, the fever re-appeared but with tertian type. The paroxysms which were severe, were followed by great languor and general debility. During six weeks the disease resisted the general remedies, among which bitters formed a great part; the author could not venture to prescribe the bark, as well on account of the disgust of the patient to that remedy, as of considerable pains in the breast, of which the patient complained much, and which it was apprehended bark might increase. This was the state of the case when the author heard of the use of gelatine in this disease; he thought the opportunity a fair one for a trial, and which was done in the following manner. On the 17th of March, immediately before the cold fit, eighteen cakes or *tabletts* of the gelatine were taken in three doses, after the interval of ten minutes between each; each cake contained two drachms of the gelatine, and which was melted without any addition of water; the effect was immediate and astonishing, both the length and intensity of the paroxysms were diminished, the heat was more mild, and instead of twelve hours, the ordinary period of duration of the fit, it lasted but six. The regimen necessary to be observed, and which consists in a soup, an hour after the access, some roast meat, bread, prunes, and half a pint of wine, was strictly attended to. Three hours after the access, twelve drachms of the gelatine were administered; four hours after, fourteen more; two hours after meals, the same quantity. This was continued every day. The 19th the same was continued, and the access was found to come on two hours earlier; no shivering, the sense of chilliness trifling, the heat pretty strong, general lassitude, pain in the head, cholic pains after the second dose of the gelatine, and immediately after which a bilious purging came, so as to oblige the patient to go six times in the space of twenty minutes; at the end of four hours, the patient found herself well; the paroxysm lasted but three hours, consequently had diminished three-fourths. The 20th she felt herself comfortable, and began to occupy herself, which she had not done for some time; the gelatine was continued, no

purging

purging followed, and the face began to assume a florid healthy appearance. The 21st, the access came on two hours earlier; no shivering, gentle heat; the fit continued but an hour and a half; a diarrhœa came on as before. The 22d, intermediary day, the same regimen and use of the gelatine unattended by diarrhœa; the functions of digestion were much better, appetite more strong, and an obvious increase of powers; the patient employed herself as in a state of health. On being asked what sensation she experienced after taking the gelatine, she answered, that she felt a gentle heat internally. The 23d, the same treatment was continued; the access was hardly perceivable; the pain in the head and diarrhœa continued but half an hour. The 25th, there was no fever, no shivering, but a slight diarrhœa, and flying pains in the head. This day, which was the day of accession, the patient did her business as on the intermediate days. From that period to the present, 22d of April, the fever has not appeared. The use of the gelatine was persevered in fifteen days. After the disappearance of the symptoms, her strength, &c. were better than before she was attacked. Since the gelatine has been discontinued she complains of a weight in her stomach after meals, and which she did not experience during its use.

Such is the history of the case which M. Gilbert gives of the administration of the gelatine; if to this be added the number of observations made by M. Seguin, and which have been reported to the National Institute, as well as the corroborating testimony of the persons directed to pursue the inquiry in the hospital of the Medical School, we can hardly doubt but that the materia medica will be soon enriched by a new remedy.

The author asks, what notion we should form of the action of gelatine on the animal economy? The essential character of this substance, is that of being a matter highly nutritive and analeptic, that which has the least want of assimilation to be converted to our use, and changed to our proper substance; such is the point of view in which animal chemistry at present places it. This principle admitted as incontestible, let us, says the author, enquire into the nature of the fever; and without absolutely determining its proximate cause, let us judge of it after the inductions which the union of its remote causes present. It is an opinion generally received at the present day in physic, that intermitting fevers are produced by the action of a sedative cause, or of a debilitating one, which particularly

affects the nervous system; and what proves this assertion is, that all those causes which debilitate, such as marshy exhalations, contagion, weakness of the organs of digestion; the passions which depress, as fear, &c. repeated purges, sudden changes of climate, produce and keep up intermittents; while, on the other hand, every cause which excites, whether physical or moral, bark, wine, opium, the return of the warm season, a sudden fit of dissipation, a vigorous effort of the imagination, &c. suspend or cure intermittent fever. From all this may we not conclude that gelatine produces on the stomach and the numerous nerves which go to that organ, an excitement which is propagated to all the system of the animal economy? And what seems to favour this opinion is, that in proportion as the fever is subdued, the powers return, the healthy appearance of the face begins to shew itself; in short, every thing announces that to the sedative cause which predominated during the fever, has succeeded an exciting action, which cured the disease; and what proves that the gelatine acts on the nervous system is, the suddenness of the effect produced on entering the stomach, an immediate diminution is perceivable in the degree of heat, and the spasmodic state of the skin; effects which are well known to be owing to nervous irritation.

The author tells us, that his intention was only to present a simple, theoretical view of the question, and which he believes to agree with the doctrine of M. Seguin, and which is supported by facts. M. Seguin, it appears, has proposed a new theory. The knowledge of the chemical action of gelatine on particular animal substances, when brought in contact, enables him to explain its mode of operation in the cure of intermitting fevers. Until M. Seguin brings the proofs of his doctrine, the author recommends to medical men the necessity of multiplying properly attested facts. He has imagined, that the Medical Society would gladly receive his communications on this subject; and to leave no difficulty in the way of those who may think the question worthy of further inquiry, he gives the process, which M. Seguin follows in the preparation of the gelatine,

Mode of preparing Gelatine.	℔
Of the finest and most transparent glue —	3
Common water — — — — — —	15
Melt and clarify it with white of eggs, and filter it through a cloth, to which add of sugar	3

Evaporate the whole on a slow fire, till the quantity of water be reduced to four-fifths; there will remain in the mixture equal quantities of the materials, sugar, gelatine, and water, 3lb. Such is the preparation in use. Run the liquor on a glass mould with raised edges, and about a square foot in surface; the substance must be left to coagulate, and which is afterwards to be dried on an iron grating, divided into spaces of an inch square; you will have cakes containing two drachms each dose. On the commencement of the shivering, from four to six of these cakes are to be given in three doses, at the interval of ten minutes; and during the intermittent, from an ounce and a half to two ounces are to be given every four or six hours.

AN ANALYTICAL DESCRIPTION of certain STONY CONCRETIONS (*Phosphates of Lime*), *coughed up from the Lungs by* JOSEPH SHILDIGGER, *a Patient in the New-York Hospital, with Practical Remarks on their Formation. By M.* LE BARON DE CARENDEFFEZ. *Read before the Physical Society of New-York, October* 6, 1802.

THIS man was by trade a stone-cutter, and was admitted into the hospital with phthisical symptoms. He had great difficulty in breathing, violent cough, expectoration of pituitous and purulent matter, sometimes mingled with blood, considerable emaciation and night sweats. He also frequently brought up small stones, which have amounted, by estimation, to more than two hundred. In proportion as these have been voided, his symptoms have been relieved. A suspicion had arisen that these stony concretions were formed from the dust, inhaled while he was at work in shaping quarry-stones, by his mallet and chisel, for the purposes of architecture. A parcel of these hard substances which he had spit up, having been given by the patient to the attending physician, and obligingly put into my hands for examination by Dr. Mitchill, I take this opportunity of communicating to the Society the result of my inquiries.

These morbid or preternatural calculi were of irregular shape, very hard, and of a greyish or pale slate colour.

When subjected to the operation of acids, both vegetable and mineral, for some time they became white, and seemed to be softer as they lost their grey colour, which appeared to be derived from a glutinous slime.

Treated

Treated by watery solutions of alkalies, both in their caustic and carbonated states, this glutinous substance was not decomposed, but separated, dissolved, and converted into a whitish compound resembling soap.

Some of the concretions were then mixed with an equal weight of carbonate of soda, grown dry by spontaneous efflorescence, and exposed to the heat of a reverberatory furnace, to determine whether they were of a siliceous nature. But nothing of a vitrifiable nature was observed. Failing thus to obtain any kind of glass, I concluded they contained no siliceous ingredient. The crucible then being taken from the fire, cooled and inspected, I was surprised to find the concretions in a heap, and suspended, as it were, in my crucible, without having undergone any change of their original figure, and without manifesting the smallest signs of vitrification. At the same time the whole inside of the bottom of the vessel was turned to glass, by means of the siliceous matter, which, as is well known, is a constituent ingredient of the Hessian crucibles which I employed.

On taking them from the crucible I found they had become brittle, and could easily be rubbed to pieces between the fingers: the gluten had been consumed, and they had become as white as in the former experiments.

On weighing them again, they were found to have lost scarcely three grains of their original weight; a loss which I ascribe to the animal gluten which connects, and, as it were, cements the particles together.

Some of the calcined matter being then reduced in a mortar to a very fine powder, I first diluted it with a little water, and afterwards poured on it about two-fifths of its weight of good sulphuric acid. Having been mixed well, they were exposed for three hours to a moderate sand-head. On examining the mass, I found it thick, viscous, and adhesive. I diluted it with water, and it reddened the tincture of litmus, and possessed a sour but agreeable taste. This was easily distinguishable for being an acidulous phosphate of lime; 1. By its dissolubility in water; 2. By its precipitating with lime-water, a regenerated insoluble calcareous phosphate, which was not decomposable by alkalies; 3. By its forming, with ammoniac, soda, pot-ash, and magnesia, as many particular phosphates. These phosphates precipitated a true phosphate of lime from the mixture, by depriving it of the surplusage of acidity; and from this surplusage only these new phosphates were formed. To this excess of phosphoric acid, the mass owed its solubility

bility and fluidity, for as soon as it lost this superfluous portion, it became an insoluble precipitate.

The oxalic acid acted upon this acidulous phosphate in a much more powerful manner. It decomposed it entirely by attracting its calcareous basis. Therewith it formed immediately an insoluble oxalate of lime. This fell to the bottom, while the liberated phosphoric acid swam in the liquid above it. I washed this precipitated oxalate of lime in water until it became tasteless, and then, on decomposing it by the carbonates of potash and soda, obtained carbonates of lime.

The sulphate of lime, formed by a decomposition of a part of these concretions, was purified and separated from the acidulous phosphate of lime by repeated washings. Being unable to decompose this earthy salt by carbonates of potash, soda, or ammoniac, I succeeded in forming an hydro-sulphure of lime by means of powdered charcoal in a sufficient heat. From this I obtained the sulphur by means of vinegar.

The result of all these experiments is, *that these pulmonary stones or concretions are true* PHOSPHATES OF LIME.

Their formation is owing probably to the great quantity of this calcareous salt carried into the system, with both vegetable and animal food. In order to keep it dissolved in the fluids, the constitution ought to be supplied with a surplusage of phosphoric acid. When there is a deficiency of this phosphoric menstruum, these concretions are formed in different parts of the body. Hence, when there is no excess of phosphoric acid in the blood and secretions, we so often find concretions similar to these in the kidneys, in the bladder, in the bronchia, in the lungs, and in other places.

There is every reason to believe, both from the probability of the thing, and from chemical experiments, that such concretions as these would not be formed, if there existed the requisite superabundance of phosphoric acid. For if this was present in sufficient quantity, it would soften, dissolve, and hold in solution the neutral earthy salt in all cases, after the same manner that the great quantity of it in healthy urine is kept dissolved and suspended,

The oxalic and sulphuric acids seem to have a powerful agency in totally loosening the compages of bones, and of disposing them to be dissolved in water; while the other acids, of whatever kind, though they may appear to dissolve them, do no more in fact than separate the particles, which

which, instead of undergoing solution, are precipitated in the form of a white and granulated powder.

All these facts which I have seen and derived from my own experience, in submitting these concretions to the action of different acids, and all the others which I have gathered from experiments made on calculi of the kidneys and bladder, convince me that most reliance is to be placed on THE OXALIC and PHOSPHORIC ACIDS for destroying these terrible concretions. While the *nitric* and *muriatic* acids recommended by Messrs. Fourcroy and Vauquelin, do not act so powerfully upon these calculi, are more disagreeable to the taste, and are more stimulant upon the living parts, without having a proportional action upon the stones. On the other hand, considering that the *oxalic* and *phosphoric* acids may be exhibited in greater quantity and higher concentration than the others, I think them highly deserving the attention of physicians: I therefore recommend them to their notice and trial, as promising to do much in the cause of humanity, both in the form of drinks and injections.

ACCOUNT *of the latest* EXPERIMENTS *on the* APPLICATION *of* GALVANISM, *for* MEDICAL PURPOSES, *made in* GERMANY.

[Continued from p. 62.]

IN applying Galvanism for the cure of amaurosis, Dr. Martens made use of the following methods: He conducted it by means of two directors of brass wire, which were insulated to the nervous branches that issue above and below the eye; but finding this method not to answer its purpose, he took two copper plates, which were on one side a little excavated, and flat on the other; he combined them with a string which he fastened in the rings made on the flat side of the plates, and thus tied them to the eyelids, after he had laid under the plates round pieces of cloth, which had been previously dipped in pure water; the conducting chains were afterwards applied to the rings on the back of the plates. This manner of applying Galvanism however was soon left by the author, when he perceived that after each experiment the conjunctiva became red and inflamed; in lieu of which he adopted the following method: He ordered the patient to take in his mouth a silver spatula, to which the conducting chain had been adapted,

adapted, and having moistened the eyelids, he applied to them a double armed conductor, which was attached to the other chain. In complete amaurosis, he thinks it advisable to put a blister on the processus mastoideus; and the place having been deprived of the cuticula, he applied one conductor to it, while the other was held to the eye of the same side. Dr. M. mentions a case of rheumatic tooth-ach, which was instantly removed by applying on each side of the gums the two Galvanic conductors. The most proper time for the application of Galvanism is the forenoon, the body being then more sensible and fit to receive the impression of the Galvanic stimulus. He likewise cautions the patients who use the Galvanism in difficulty of hearing and deafness, against drinking wine, at least he advises to abstain from it during the day when they are galvanised. Dr. M. farther endeavours to determine the indications for applying the Galvanic agens, which according to him are the following: 1. Diminished activity of the cutaneous organ, suppressed transpiration, or any other obstruction in the cutaneous vessels and the tela cellulosa, &c. hence its great use in rheumatic complaints. 2. Diminished activity in the circulation of the blood, extravasations and obstructions in the blood vessels, &c. whence we may derive great advantage from the application of Galvanism in wens and bronchocele, &c. 3. Torpid state of the nervous system.

The indications which are to be followed in single morbid states, in which Galvanism may be employed, are thus stated by the author. 1. In deafness and difficulty of hearing, particularly in young healthy persons, and if the complaint is not too much rooted; farther, in deafness originating from a rheumatic cause, from a paralytic state of the auditory nerve remaining after apoplectic fits, &c. Contra-indications in these cases, are congestions of blood towards the head in plethoric subjects, in which a strong tinkling of the ears generally takes place, running of the eyes, hereditary deafness, &c. paralyses which are not too inveterate. 3. Amaurosis, that species particularly which originates in a paralytic state of the optic nerve. 4. Rheumatic complaints, arthritis, ischias, tooth-ach, in all which complaints Galvanism has been frequently employed with success. 5. It is likewise a very good stimulus in asphyxia or apparent death.

On drawing a parallel between Galvanism and Electricity, Dr. Martens finds them to differ in the following points: 1. Galvanism is stronger, more penetrating and efficacious, its stimulus being at the same time more permanent. 2. Its action is generally limited to the

part

part on which it is directed. 3. Galvanism seems not to have the power of attracting light bodies, as we observe in electricity. 4. It seems not to be increased by insulating, as is the case with electricity. For medical purposes the application of Galvanism is undoubtedly preferable to that of electricity, as it is more convenient, and its action more certain and efficacious than electricity. There are finally added, some cases in which Galvanism was successfully employed by a practitioner, of which we think the first only worthy to be mentioned, where a paralysis of one side of the face was cured by means of the Galvanic agens after the fruitless application of other remedies.

Dr. Marcus, of Bamberg, likewise communicates several experiments which were made with the medicinal application of Galvanism at the great hospital of Bamberg. It was used in several cases of paralysis, as hemiplegia of the left side, paralysis of the right and of the left arm, in the last of which cases a complete cure was effected merely through the medium of Galvanism; farther, in several cases of deafness and difficulty of hearing, where it generally produced considerable relief. He employed it also in the following cases. 1. A violent head-ach which had remained after a remitting fever, and which would not yield to any remedy, was removed by the application of the Galvanic stimulus. The pain began to cease during the first experiment, when the temples, the forehead and the neck were moderately galvanised. Two or three days after, as the head-ach had returned, the experiment was repeated, by which it was entirely cured. 2. A sciatica, which had resisted all remedies for more than two months was entirely cured by Galvanism, after its application had been repeated for eleven days, one after another. 3. Epilepsy, of which three cases are related, where the paroxysm immediately ceased on bringing the patient in combination with the Galvanic battery by applying one hand to the negative pole, while the other was held on the positive. Besides this, Dr. M. orders the patient to be galvanised at the time when he is free from his disease, and he found in one case the paroxysm was postponed. He recommends to apply the Galvanism to the back bone, where the nerves of the neck, of the back, and of the lumbar region issue.

In Professor Loder's Journal for Surgery, we find also some accounts of the successful application of Galvanism in several diseases, particularly in dimness of sight, &c.

Dr. Hellwag, of Eutin, in the bishoprick of Lubeck, has communicated his experiments on applying Galvan-

ism

ism for medicinal purposes, in a small work entitled, "Erfahrungen uber die Heitkraste des Galvanismus;" i. e. Observations and Experiments on the Medicinal Virtues of Galvanism. The first experiment was made on a boy five years of age, who was deaf and dumb, though he seemed still to hear very strong sounds. The battery of which he made use was constructed of crown pieces and zinc-plate with round pieces of paste-board soaked in salt water. One of the conductors being applied to one ear, the other ear was touched with the other conductor, moving it to the ear and from it alternately. A battery of 20 strata was thought sufficient; but when its action seemed to decrease, the number of strata was raised to forty. At the end of the two conductors, round pieces of sponge soaked in salt water were afterwards fastened, which were introduced into the ears. The operation lasted generally from ten to twenty minutes. The experiments were thus continued for about a fortnight, before any effect could be perceived; but about this time the patient began to hearken to moderate sounds with visible pleasure, and even turned round when he was gently called by his name; he seemed to pay attention to every new sound which he perceived, and by degrees he could even hear a watch go at the distance of ten inches; in this way his audition gradually improved, and he learned to pronounce letters and words, though but imperfectly; but not finding it attended with further benefit, the experiments were discontinued. The success however of this cure induced Dr. Hellwag to make farther trials with the medical application of Galvanism, for which purpose he constructed a new battery, taking plates of metal, of which printing types are cast, instead of the silver crown-pieces, and in place of the salt water he chose the gall as a wet conductor, which he found extremely efficacious. For better convenience the battery was placed horizontally. The conductors were brass wires, at the end of which he fastened small sponges, which he could conveniently introduce into the ear. Dr. H. then relates six cases of deafness, in which he employed Galvanism. A youth, of eighteen years, who had lost the power of hearing by a scrophulous ulcer in one ear, and the audition in the other had suffered considerably, was galvanized with seeming success, but shortly after he relapsed into his former state. Another patient, twenty years of age, who was born deaf, and whose organs of hearing were touched only by certain sounds, as the barking of a dog, the sound of a flute or harp, had been galvanized about a fortnight for

for half an hour every day, when his ear became sensible to other sounds, as even to hear the noise which a watch makes when going. A similar success was observed in a girl, sixteen years of age, who was nearly deaf before. A young man was frequently affected with difficulty of hearing, which had often yielded to different external remedies. As his complaint returned, Dr. H. began to try on him the Galvanism, and having been under his care for some days, the patient suddenly raised himself during the experiment, as he felt a violent head-ach, attended with strong tinkling in the ears, which having gradually decreased, he perfectly recovered his hearing. In another man, sixty-eight years of age, who after a retrogade exanthema, had been afflicted with dimness of sight and difficulty of hearing, was considerably relieved by the use of Galvanism. A girl, nine years of age, was nearly cured of a difficulty of hearing, which occurred after a violent otalgia. Dr. Hellwag likewise employed the Galvanism in other diseases, of which he relates five cases, partly paralytic diseases, and two cases of amenorrhœa; but no remarkable effect could be observed from the application of that stimulus.

At the end of Dr. Hellwag's publication are annexed some observations and experiments with the medical applications of Galvanism, made by Dr. Jacobi, which he owns were not attended with such a degree of success as other medical writers have boasted of. The author then enlarges on the causes of the unsuccessful application of Galvanism, which partly is owing to the improper application, partly to a want of tone in the nervous and muscular fibres, which he thinks must in general be present to secure the success of the Galvanic operation; he therefore advises to employ a tonic method of cure at the same time with Galvanism, as cold baths, sea baths, steel, bark, &c.

To the Editors of the Medical and Phyfical Journal.

GENTLEMEN,

YOUR strict attention to whatever can promote the interests of our valuable profession demands the thanks of the medical world, and emboldens me to presume that the following remarks will meet your approbation.

The

The enormous price of books is an evil calling loudly for redress; it is a subject too interesting to the literary community to be longer neglected. The fashion of publishing every production in a splendid style, is a serious obstacle to the diffusion of knowledge. Is it vanity in the author, or folly in the public, that gives us such fine editions in quarto and folio? Every prospectus of publication in these times, is more prolix in its detail of fine wove paper and handsome type, than explanatory of the merits of the work. In the wide range of letters, from the Principia of Newton to the history of Jack the Giant Killer, we have such emphatic description of the quality of paper and type, that an ignorant person might be led to believe all human learning was manufactured at the mill and foundery. Probably the citizen supposed the bookbinder was a profound scholar, when in fitting up his villa he expressed a particular desire that his library might be composed of books *elegantly bound*, without any anxiety respecting their contents. Sir William Blackstone honours the Faculty, when recommending the study of the law, "to complete the character of general and extensive knowledge; a character which their profession, beyond all others, has remarkably deserved."* I fear this remark will soon be applicable to a *fortunate few*, if the price of learning continues to advance.

Truth and science, Gentlemen, are like Lavinia, "when unadorned, adorned the most;" and it becomes the guardians of literature to protect their charge from the dangerous innovations of frivolous fashion or vain parade. The evils arising out of this ridiculous propensity to gaudy shew are not confined merely to the pocket, but must have a farther and equally pernicious effect. Is it not to be feared that the exterior will subtract from our attention to the intrinsic value of the book; and that in our admiration of art we forget the utility of science? Can any decorations add to the importance of the works of Hypocrates, Boerhaave, Cullen, Monro, Hunter, and Darwin? Certainly not. These authors may be ranked the first in the scale of medical and physiological repute; their writings have been numerous; but to enable the professional world to profit by their labours, they should be published in the cheapest forms possible.

For

* Vide Vol. I p. 13. Commentaries on the Laws of England.

For the honour of science, let her be clothed in plain attire, and consign the trash of the day to the livery of red Morocco and gold leaf. The nobleman of high rank and acknowledged worth is contented on common occasions with a respectable decency of exterior, whilst the fluttering coxcomb eclipses the rainbow. Novels, romances, and plays, are on a parallel with the gaudy Fribble; and as they possess little internal worth, I think their readers may properly be taxed for their folly. But in a grave, studious profession, like ours, embracing in its perfection *all* the sciences, wherein it is justly said, Ars longa et vita brevis, the means of information cannot be too much facilitated; nor can I sufficiently lament the melancholy effects that I hourly feel of this universal mania.

I know it may be said, that the high price of books arises partly from the heavy duties on paper. Admitted, but why add to that evil by unnecessary, extraneous, and expensive embellishments? May we not reasonably suppose that government saw our passion for beauty of art, and resolved to share the spoil with the artist? If philosophers had not been seduced by fashion or vanity, this folly would have been confined to foolish works alone.

The genius and industry of the present age have triumphed over the obstacles arising out of expence, but surely it is a legitimate inference that the profound discoveries and elegant improvements in every branch of medical science would have been more amply diffused, if the poor in pocket could have attained the possession of them.

Every author in medicine and surgery should reflect that there is a particular description of the Faculty precluded from the means of improvement by the enormous price of scientific books. It is in the metropolis, and large towns only, where professional men can obtain literary enjoyment at an easy rate, by forming themselves into societies; but what is to become of the country practitioner, who within his circle is an equally important, and ought to be an equally learned and respectable character? The objects he has to practice on, hold life and health in as high estimation as the pampered inhabitants of wealthy cities, and if public considerations might be indulged in such a case, we might perhaps in truth accord with Dr. Adam Smith,* that

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* See his incomparable Inquiry into the Nature and Causes of the Wealth of Nations.

that they more immediately form the basis of national opulence. If a solitary newspaper, penetrating his obscure retreat, announces to him the publication of a valuable work, he longs to peruse it; but the fine contour of the type, the beautiful texture of the paper, and probably the elegant binding of the splendid quarto, form so many insuperable obstacles to his *borrowing* it, how then should he *buy* it? he can only sigh over the sum total of its nominal value. The Zoonomia of Dr. Darwin (a work that may vie with any, whether antient or modern) was first published in a form that limited its distribution, and consequently its utility; the same may be said of Mr. John Bell's Principles of Surgery; its enormous price places it beyond the attainment of men in moderate practice, and these are the men who must require the result of another's experience to supply the deficiencies of their own. I am not ashamed to acknowledge, Gentlemen, that I *feel*; yes, I sensibly *suffer*, from the evils of which I presume to complain. My little library might have been twice its magnitude, if half of its prime value had not been sunk in the quality of type and paper. I am unable to store my mind with the estimable discoveries of my cotemporaries, because I could barely afford to purchase truth in her naked simplicity, and my ambition will never extend to the possession of her decked in *imperial* attire.

It is a melancholy consideration, that whilst almost every other class of men are in a state of improvement, the Faculty are certainly going retrogade; I speak to their revenue; competition has reduced the Profession to the lowest ebb, consistent with comfortable support. Half a century has produced an enormous advance in the price of all the articles of the materia medica, as well as of the necessaries of life; but no equivalent advance of charge by the apothecary has taken place. In short, such is the state of the country practitioner, that empiricism must soon supercede science, if every facility is not afforded him to procure information.

To remedy these evils, I humbly beg leave to recommend that all writers on subjects connected with medicine and surgery should publish on coarse paper with a plain type; it may be profitable too to intrude a little more on the margin. Dr. Darwin suggested the propriety of making the letter-press a spectrum with the ground, or paper, and perhaps by its superior distinctness we should be able to use paper of a quality still less expensive. The literary works of our continental neighbours, are almost all of them published

lished on a coarse paper; and perhaps the general diffusion of knowledge over France and Germany, in spite of their political slavery, may be attributed to the easy means of attainment.

Consistently with the above views, I call upon you, Gentlemen, to give the first example of departure from fashion. It would be highly honourable, and, I judge, equally profitable, to stand forward the first instance of independant character; add to this, that the circulation of your work would be infinitely extended, and the discoveries in medicine and surgery more widely promulgated. If I did not conceive the Medical and Physical Journal to be a miscellany of deserved repute, I should have presented my remarks to the Editors of some other publication; and assure you, that I do not compliment when I say, that by your giving an example of literary economy, you will influence authors as much as you will benefit readers. The Faculty, Gentlemen, have a sensible interest in my appeal to your prudence, and I presume will not refuse to join in my request, that you will abstract a little from the beauty of your work to render it of more universal utility.

It is possible some may object that any change in your mode of publication will diminish its value by destroying its uniformity; and that the taste of the public must be complied with. But I am sure, that however the country practitioner may hunger for knowledge, he cannot at present taste it; and it is of very little importance to a man anxious in the pursuit of professional information, whether truth be depicted on brown paper or vellum.

To shew that a scientific publication can sustain its character without condescending to put on a fashionable dress, I refer you to the Gentleman's Magazine, which, I believe, is not considered less valuable, because it is less *pretty* than the ephemeral productions of many moderns, and I think I dare venture to predict, that the Medical and Physical Journal will not sink in the public esteem, whilst conducted on its present principles, however plain the paper and type may be.

I hope, Gentlemen, to be believed when I declare myself a sincere admirer of the works of art; but when I see learning reverenced the more for its trappings, I fear a decay of public wisdom. The art of printing was invented to communicate knowledge, and has been the happy means of diffusing sciences and arts, improving our morals and politics, and extending human civilization through the remotest regions; but it will cease to be subservient to such purposes,

purposes, because it bids fair to become the *primary* object of consideration.

In offering you the above remarks, I hope, Gentlemen, I am not actuated entirely by a selfish motive, and I beg that they who may see no danger, or who are too rich to feel any inconvenience, from the subject of my complaint, will give me credit for a small share of anxiety respecting the welfare of that Profession which I am desirous not to disgrace; but if my poverty of pocket is deemed criminal, I must stand convicted, and assure you that if knowledge is to be sold by *aspect* instead of by sterling worth, my head will soon be as light as my purse; I shall be reduced to the distress of the mortified connoisseur, for I cannot purchase the picture on account of the expence of the frame.

I am, &c.

Gillingham, Aug. 9, 1803. JOHN WILSON.

To Mr. DUNNING, Plymouth Dock.

MY DEAR SIR,

FROM the consideration of your having been one of those valuable members, who have contributed towards the almost general adoption of the Vaccine pocks, and of the zeal you displayed in overcoming by your writings and practical proofs, the prejudices that existed against so beneficial a discovery, I conceived the following translations from some Spanish manuscripts, respecting the discovery and effects of the goat pocks, would not be unacceptable to you; as it evidently shews how far the zeal of a few can go in remedying the evils of human life, and the benefit that may be expected from such laudable examples. The goat pocks were discovered as far back as February last, but from its not having been proved to equal the vaccine, I forbore to give you any information relative to this subject, until I was properly informed of its good effects. The discoverer of this new species of pocks, is the Hebrew Professor of the Royal College of San Isidro, of this town; and as I am intimately acquainted with him, having known him these eight months, he has been so good as to offer his assistance in furnishing with every information any of my friends, who may wish to consult

 him

him on the subject. Should you then have any inquiries to make respecting the goat pocks; besides, if you wish to propose any medical questions concerning any branch of physic as practised in this country, this gentleman has assured me, he will punctually answer them. From the present uncertainty of affairs, and from the far advancement of summer, I shall, in all human probability, leave this place in the course of seven or eight weeks, or perhaps sooner; therefore, you have the choice of either writing to the gentleman himself, or to me, under his address, which I have subjoined, who in case of my having left Madrid, will inform himself of the contents of your letter, and forward to you, as soon as possible, the required information.

I am, &c.

Madrid, July 8, 1803. W. A.

No. 1.

To his Excellency, Peter Cevallos, &c.

My much esteemed Sir,

AS the health and happiness of the people is the supreme law, I cannot omit troubling your excellency's attention with a discovery which has for its object the benefit of mankind in general, and of this nation in particular. As there are no cows to be found here with pocks for the purpose of inoculation; and on account of this, the faculty find themselves reduced to the necessity of procuring vaccine matter from other kingdoms and provinces, to the detriment of the public health, arising from different causes; so that this valuable discovery could not produce in this kingdom the same happy effects, which have attended it in other countries; furthermore, having discovered in the vicinity of Madrid some goats to have the pocks, the matter of which I found by experience to have the same quality, and to produce the same effects in inoculation and preservation, as the vaccine matter; in consideration that we have fresh matter in this country in abundance, it will most assuredly produce more beneficial effects, than the matter introduced from foreign countries, of whose legitimacy no farther security can be obtained, than the assertion of the person who sends it; also extracting matter from one person for the inoculation of another, may also beattended with inconveniences. Your Excellency ought to inform the Royal Medical Society of the purport of this letter, as this body can make the necessary experiments

pro and contra; and should it turn out, as I flatter myself it will, I shall have the satisfaction of having contributed in some measure to the preservation of some of our species, which is the greatest happiness I can possibly enjoy; and obeying the commands of your Excellency, I remain your most stedfast friend, and assured humble servant,

Royal College of San Isidro, Madrid, Feb. 18, 1803. JOHN JOSEPH HEYDECK.

No. 2.

To Mr. John Joseph Heydeck.

Sir,

I received your letter of the 18th inst. which informed me of your having discovered different goats of this country, with pocks the same which cows are known to have; the matter being of the same quality, and producing the same effects by inoculation; which discovery I have laid before the Royal Society of Physicians for their investigation; and have to thank you for the zeal you have shewn for the public welfare. I shall always be your most stedfast friend and assured humble servant,

Aranjuez, Feb. 25, 1803.* PETER CEVALLOS.

No. 3.

His Excellency Mr. Peter Cevallos, *First Secretary of State, and Privy Counsellor of his Majesty, has communicated to the Royal College of Physicians, the following Royal Order:*

Mr. John Joseph Heydeck, Professor of the Royal College of San Isidro, has communicated to me the circumstance of his having lately observed in different goats in the neighbourhood of Madrid, pocks the same as cows are known to have; and having taken matter from them, found it to possess the same quality, and to produce the same effects in inoculation; so that he believes this discovery may be very beneficial to this country, as there is a scarcity of cows, and perhaps there are not any with the pocks; the faculty being, in consequence, reduced to the necessity of procuring vaccine matter from foreign countries, losing by this means some of its power, to the pre-

* Aranjuez, the King of Spain's country seat, seven leagues distant from Madrid.

judice of those inoculated with it, I communicate the same to you for the information of the Royal College of Physicians, in order that they may make a proper examination of this important discovery. I remain your most stedfast friend, and assured humble servant,

Aranjuez, Feb. 23, 1803. PETER CEVALLOS.

To Mr. JOHN JOSEPH HEYDECK.

In obedience to his Majesty's commands, the Royal Medical Society have thought proper to forward the official letters, accompanied with the royal order of his Majesty, to Doctors Ignatius Maria, Luiz de Luzuriaga, and to Mr. Peter Hernandez, physicians to his Majesty, that agreeably to your information, they may be pleased to make the necessary experiments, and to acquaint the Society with the results. The purport of which letter I herewith inform you, and shall always remain your most stedfast friend and assured humble servant,

MANUEL CORGULLO.

An Account of an Inoculation tried with Matter taken from Goats, on two Children, by the Physicians commissioned by the Royal College of Physicians, from the 26th of May, 1803.

In consequence of the instructions which I gave to different goat-herds of Madrid, and its neighbourhood, respecting pustules, which, from time to time, are accustomed to appear on the teats of goats, I was advised by Manuel Lopez, goat-herd in the street of S. Bruno, opposite the Royal College of San Isidro, who had some goats with the pock, of the same quality which I described to him on the 26th of May.

May 27. I went to the house of the said goat-herd, and discovered that the goats really had the pustules I was in quest of, one in particular, whose pustules were full of virulent matter, and fit to extract for inoculation; of which I informed the commissioners of the Royal College of Physicians, Mr. Ignatius de Luzuriaga, and Mr. Peter Hernandez. At seven o'clock in the evening they attended, accompanied by Mr. Nicholas Diez, surgeon; and on examining the pustules, found them full of virulent matter, and fit for inoculation. They practised the greatest diligence to find a subject for inoculation, but not finding one, the surgeon, Mr. Nicholas Diez, took matter from the goat, and put it between two pieces of glass for its preservation.

The

The goat, according to my observation, shewed no visible symptoms of pain; her milk was plentiful, and excellent; she eat well, and laboured under no inconveniency from the pustules.

May 28. The wife of the goat-herd acquainted me that she had met with two poor women, who, for a gratification, would permit their children to be inoculated with the goat-pocks; I immediately acquainted the Medical Commissioners of the same, and at six in the evening, Mr. Hernandez, accompanied by Mr. Diez, surgeon, came and informed me, that his companion could not come by reason of his occupation, when the aforesaid Mr. Diez inoculated Nicholas Sanz, with matter taken from the goat, a child between two and three years of age, son of Nicholas and Isidora, living in Angel Street, in the yard belonging to the Mill House; and Maria, (whose mother's name is Michaela, and her husband, Mr. John Curial) a child eight months old, who live in St. Bernabe's Street. The inoculation was made in the arm, and both mothers declared their respective children never had the small-pox.

May 29. I went at nine in the morning to see the children that were inoculated, and found them without any symptoms of novelty.

May 30. I saw them at nine in the morning, but without any change.

May 31. At nine in the morning, I saw the child Nicholas, and was assured by his mother that he had a looseness in the night; this regularly proceeded from raw beans, which I found him eating the preceding days.

June 1. I discovered, at nine in the morning, two small pustules in both arms where the incisions for the inoculation had been made, which visibly proceeded from having been scratched, by which means the pocks that had been formed were destroyed. I observed nothing in the child Mary.

June 2. At nine in the morning, I discovered the child, Nicholas, to have a slight fever; his mother assured me he had it all night; I observed also some round spots of a red colour on his arm, the sides of the pimples of the incisions were something more inflamed, having a sufficient moisture; the child was seen to scratch them, though the mother was told to hinder it by putting on him a jacket, which she neglected doing. As no new appearance was visible in the child Mary, it made me suspect that she might have already had the natural small-pox, and I was not deceived in my idea; for the wife of the goat-herd assured me of it

 afterwards

afterwards, and also assured the gentlemen, Mr. Peter Hernandez, and Mr. Nicholas Diez, that the child really had had the natural small-pox, which was basely dissembled by the mother, on account of the gratification, which was afterwards confirmed to me by the aunt of the goat-herd, as also by the mother herself, and finally it is discovered she is not the daughter of Michaela, but a child of the Foundling Hospital.

June 3. The mother of the child Nicholas, called me at seven in the morning, telling me the child had a high fever all that night; indeed, I found him to have a very slight fever, and the spots which I observed before, were increased in size, and inflamed, of an erysipelas colour. I informed the gentlemen commissioners, Mr. Hernandez and Mr. Diez, who went to see him.

June 4. At nine o'clock in the morning, I found in the place of the red spots, some pimples with clear matter; (and desired the mother to hinder his scratching) which I also acquainted the gentleman commissioners with. At six in the evening, we found him sleeping in the court-yard belonging to the house, almost naked, at a time when it was tolerably cold, and awaking him, found him without any fever; the pimples, that were scratched, were formed into pustules, and some food being given to him, he eat it with an appetite.

June 5. At nine in the morning, the pustules were something red without any fever.

June 6. Ibid.

June 7. The pustules and incrustated surfaces were almost dry.

June 8. The pustules and incrustated surfaces have disappeared. I continued to visit the two children twice every week till the 28th of June, without discovering any change, neither could any discovery be made of their infirmity or indisposition, either from the children themselves, or from any observations of their parents. That it produces less change than the vaccine pocks, proves incontestably the simplicity and benignity of the goat pocks. Nothing new has been observed with respect to the child, Maria, having had the small-pox before; the child Nicholas, notwithstanding the little attention paid to him by his mother, and the rigor of the season, as it was tolerably cold at that time, walked about naked, making use of eatables not conducive to health, and experienced nothing more than a slight fever from the fifth to the seventh day, in which the bladders and pustules appeared; they did not

suppurate

from the circumstance of their having been scratched off; and from the twelfth nothing new has been observed.

N. B. His Majesty the King of Spain has given orders that the children in the Foundling Hospital, and charity school dependant on the same, be inoculated with the goat pocks; of the former forty have lately been inoculated.

To Mr. WARD, Surgeon, Manchester.

SIR,

AS you have expressed to me a wish, with which others perhaps may sympathize, to be acquainted more particularly with an instance of Trismus, alluded to in one of my periodical Reports of diseases in the Monthly Magazine, I have thought it right to communicate to the Editors of the Medical and Physical Journal; and, in case of their permission, to the public, a brief abstract of the case, as it was taken down during my attendance upon the patient.

I am, &c.

Southampton-Row,
July 16, 1803. J. REID.

TRISMUS TRAUMATICA.

Ap. 27, 1803. Landeman Jues, æt. 24, a marine, has left the service nearly a twelve month, having received a severe wound in his leg, which, within the last fortnight, has given him very great pain and uneasiness. A few days ago he was attacked with the usual symptoms of a *cold*, and slight fever, which confined him to bed; a day or two after which he was seized with a violent pain and stiffness of the jaw, especially severe on the left side, which has since greatly increased, and at present, (the seventh day after the attack of the disease) his jaw is *locked*, but not so completely as to prevent broths and other fluids from being poured into his mouth, and he has no difficulty of swallowing. He likewise complains of pain along the spine, and that sometimes he is drawn backward by a sudden spasm; he is likewise afflicted with pain of his left arm, and of that side of the neck with slight spasmodic twitches. Pulse quick, small, but very regular; skin natural; body very costive; some thirst; pain of head and of belly; his jaw and neck have been rubbed with liq. vol.

℞. Opii puri ℥j. Axung q. s

Ut fiat unguentum. Divide in partes, vj. Let his jaw be

be rubbed with one of these portions for a quarter of an hour. Let this be done six times in the course of the day.

Habt. Pulv. Jalap gr. xxv.

Let him have broths and beer.

April 29. The pains of his back and the spasmodic contractions have somewhat abated; and the jaw is not so fast locked. The opium was well rubbed in, but produced no inclination to sleep. Body costive.

Rep. Frictio Opiata. Hab. Pil. Opii. ij. bis in die.

May 3. The medicines ordered to be repeated, with the addition of the electuarium purgans of the Dispensary; and, if that should not operate, the administration of a clyster.

May 4. Trismus as before; severe pain of bowels, with extreme costiveness. The clyster had very little effect; the electuary none at all. Good sleep since he took the pills; pulse small and quick; no difficulty in swallowing.

Rep. Frictio Opiata. Habt. Mist. Cathart. of the Dispensary, coch. mag. ij. tertia quaque hora.

May 5. Spasm of jaw somewhat relaxed; still he complains of great rigidity of his limbs and back; took about 3 oz. of mist. cathart.; had a copious stool this morning, and another at noon; slept well last night. He began to take the bark to day. Contin.

Trismus gradually abating; his limbs are not so stiff; pain of neck and back relieved; body open; he can sit up for some hours together; good sleep. Contin. med.

May 8. Jaw cannot yet be completely opened, but he recovers strength and appetite; pains relieved; body open; stiffness of limbs abating; let him have wine and broths.

Rep. M. Cinchon. & Frictio Opiata.

May 9. Trismus as before; recovers strength; complains of pain in his thigh.

Contin. Med. Cinchon. et Frictio Opiata. Frict. femur lin. volat.

May 13. Trismus gone; still a slight stiffness of jaws and of his knees.

Om. Frictio Opiata. Con. lin. vol. et mist. peruv.

May 16. Stiffness of jaws gone; knees still troublesome; continues to recover strength. Rep.

May 19. Decidedly convalescent; let him continue the wine. Rep. mist. peruv.

May 23. Cured.

During the process of convalesence, in addition to the bark, steel was prescribed according to the following formula.

Ferri ppt. gr. v. G. myrrh. gr. x. G. Arab. q. s. Fiat mass. divid. in pil. iij. Capiat æger pil. j. ter in die.

Mr. Chamberlaine, *on the* Amendments *of the* Medicine Act.

[Continued from pp. 253—266.]

By the 25th clause, the common informer was allowed the scope of six months to bring his information; in which time the mischief he had it in his power to do, was incalculable; as must appear to any one who will only consider how much mischief might have been done, had the informations brought at the Mansion-house in a very short time after the passing of the act, by a common informer, unconnected with the stamp-office, not been quashed; as related in the former part of this account.*

Excepting in the salutary reformation of the Schedule, and the taking the business of information out of the hands of the *common* informer, and confining the power of bringing actions to the Stamp Office, in no case have persons, liable to be affected by this act, greater cause to be thankful to the respectable gentlemen to whom the committee made application for redress, than for the polite attention they paid to their remonstrances, and exposition of the destructive consequences which might possibly ensue, from the allowing the informer, by the 22d clause, SIX months to make his depredations in, before bringing his informations to issue. The committee represented to Mr. Estcourt, Mr. Vansittart, and Mr. Addington, the possibility of a man being completely ruined by the number of informations laid against him in the course of six months, for the sale of an article which he might erroneously deem not liable to a stamp duty; and they fought hard to obtain a clause in the new act, that the informer should be obliged to sue within ONE month from the time of the penalty being incurred. This ministers did not think themselves warranted to accede to; but, instead of SIX months, they consented to make it THREE months; and accordingly the 5th clause of the Amendment provides, that every information under the Medicine Act, shall be commenced *within* THREE *months after the offence committed, and not afterwards.*

Considering the very great disproportion of the penalty to the offence, it was represented, that even five pounds, the mitigated penalty, was too much to pay for the omission of a three halfpenny stamp; in reply to this it was argued,

* See page 170 of this volume, (No. 54) for August, 1803.

gued, that if a five pounds penalty attached to this, the omission of a twenty shilling stamp subjected the offender to no greater penalty. It was then suggested by one of the committee to lessen the penalty on the smaller stamps, and lay a fine ad valorem, that is, that the penalty should be in proportion to the value of the stamp omitted to be affixed.

This was objected to as being a matter that would make the act too complicated; and perhaps puzzle the Justices.—However, Government did better for us than we proposed for ourselves, by allowing the magistrate the power of mitigating the penalty to ONE-FOURTH, instead of ONE-HALF, as it before stood. (*Amendment*, latter part of clause 5th.)

It now only remains for me to take notice of that part of the act which relates more nearly to practitioners in Pharmacy, whether concerned in the sale of Quack Medicines or not: in order to shew to both how far they are exonerated from their former fears, and in what cases caution is necessary. And this brings me to the

SCHEDULE.

It would be the height of absurdity to suppose, that the mechanical parts of acts of parliament are constructed by any of those who compose the great legislative body of the nation.—They are, for the most part, composed by persons who are, or ought to be, conversant in the business which the acts themselves relate to.—But the many incongruities, and the introduction of so many articles which had no business there, into the Schedule of the Medicine Act, by the person who took on himself the trouble of favouring government with that ingenious compilation, shew that

EX QUOVIS LIGNO NON FIT LEGISLATOR.

The first material alteration we find is, that almost every article in the former Schedule, not clearly defined, has been in the new Schedule omitted; such as *chalybeate pills, carminative tincture, nitre drops, sweating powders, tonic pills*, and many others.

Arrow root, or *Indian arrow root*. This, as being more properly an article of *food* than *medicine*, and also an *unmixed* powder, (save when adulterated with potato starch, or flour, by our ingenious sophisticators) is very justly exempted from the stamp duty.

Arquebusade water. So great is the repugnance towards paying for stamps, that I once heard a man declare, that if

if life could exist without his wearing his head, he would have his own head cut off sooner than be obliged to wear a stamp upon his crown. Another, equally inimical to wearing a stamp upon his head, but more ingenious, bought a second-hand turban that had belonged to one of the Duke of York's black cymbalists, which he wore in going about his grounds on week days, and kept a hat, made before the stamp duty on hats took place, to go to church in on Sundays.

When the perfumery tax was in existence, government lost *eight thousand pounds* per annum on the importation duties on foreign articles of perfumery. Every one knows how soon the fine powdered head was converted into the black Brutus; and the perfumery tax was ultimately given up, because the cost of collecting it exceeded the sum which the tax itself produced.

I wish a similar loss to government may not be found to ensue, from the laying a stamp duty on *arquebusade water*. This composition already pays a duty of twenty-seven shillings per gallon; it is sold in pint bottles at 7s. 6d. or 8s. each. The stamp duty on each pint is one shilling, which increases the duty on the gallon to eight shillings more, or *one pound fifteen shillings* per gallon duty in all! This enormous duty must rather operate as a prohibition, the good Lady Bountifuls in the country, among whom this article principally finds a sale, will grudge to pay a shilling extra on the pint, for what they consider to be of no use to them or any one else; and will soon find some cheaper substitute to wash their neighbour's wounds with. And when we also take into the scale, that arquebusade water neither is, nor ever was, a secret nostrum, (the composition is given in foreign dispensaries, and also in Lewis's dispensary) we may fairly infer, that this is not a fair article of stamp-*ation*, and that government will lose more than will be gained by bringing it within the meaning of the Medicine Act.

Blistering ointment, Goulard's extract, Huxham's tincture of bark, Spanish juice, syrup of Tolu, Turkey rhubarb, being all articles of the London Pharmacopœia, are very properly omitted. *Eau de luce, essence of peppermint,** and *refined liquorice,* are also expunged. *Candied horehound* and *candied ginger,* and a great many articles clearly belonging

* If sold simply in a common phial, but if sold "in quackish guise," it is liable. Juniper's essence of peppermint is particularly mentioned.

longing to the province of the confectioner, but for the sale of which, many grocers, confectioners, and apothecaries have been heavily mulcted under the old acts, are now expunged.

In the former schedule, the words, "OF ALL SORTS," were annexed to the following articles: *Dentifrices, issue plasters, lozenges, lip-salves, tooth-powders, tinctures for the teeth and gums*; thus lumping into one mass every thing that could be construed to answer any of the above purposes; which made it dangerous to an apothecary to sell a little powder or tincture of myrrh, or a small box of sperma cæti ointment, lest it should be purchased by an informer, who should call it lip-salve.

In the new schedule, not only is this exceptionable, sweeping expression, "OF ALL SORTS," done away, but every one of these articles, Lozenges excepted, may be safely sold, provided not sold under the name of any person claiming a proprietary right, or pretended secret, in them, or setting forth a superiority of his own over all other articles of the same kind, by printed hand-bill or advertisement.

In the new schedule, we find an article that I never heard of before, viz. *Chamberlain's ointment*; and I merely notice it here, to say, I am very sorry that any one, bearing that name, should be author of a quack medicine; (I know it is not my friend Chamberlain, the druggist, in Fleet-street;) and I am sorry on another account, because it might be supposed by those who do not know me, that the active part which I am proud to say I have taken in this business, was from interested motives; I therefore take this opportunity of saying, that I know nothing of either the ointment or its author; that I deal not in nostrums, and that I mortally abominate all manner of Quackery.

The names of a great number of articles, not medicinal, and which appertained chiefly, I might say exclusively, to the perfumer and confectioner, have been removed, in consequence of the petitions presented, and the proper measures taken, by deputations from these bodies. But there is one species retained, *partly* medicinal, but rather more an article coming within the province of the confectioner, although largely dealt in by both the druggist and apothecary, upon which something is to be observed: I mean, LOZENGES.

Although that phrase of universal proscription, "OF ALL SORTS," is not, in the new schedule, applied to the article, LOZENGES; yet there are very few of these, which have any

any thing medicinal in their composition, that are not specified in the schedule. Such as bear the name of any particular person; as, *Ching's, Dawson's, Steers's, &c.* as also such as are sold as secrets under any fine name; as, *Lozenges of Blois, Patirosa;* or any expressing the quality or the complaint they are good for; as, *paregoric lozenges, worm, heartburn,* or *tooth-ach lozenges,* are clearly within the meaning of the act. These there can be no dispute about; but there are several sort of lozenges prepared, which never were, by any person whatever, pretended to be kept secret, as to their composition; for instance, peppermint lozenges, ginger, horehound, and some others, which are, nevertheless, inserted in the schedule.

At first, it seemed the intention of government to expunge the article, Lozenges, altogether; and if that omission had taken place, there would have been no loss by it, because the 19th clause would effectually secure the duties upon all such as should come under the description of secrets in the hands of particular persons. But, as they are retained, and specifically mentioned by their different names, the dealers in that article are placed in a very unpleasant situation.

It has been already observed, (page 260) that the consumption of lozenges made in England takes off a quantity of the best double refined sugar annually to the amount of not less than one hundred and seventy tons weight; and the preparing the different sorts of lozenges gives employment to a great number of people who are called lozenge makers, and who make nothing else.

The Committee were very strenuous in their endeavours to have an exemption for peppermint lozenges and a few others of very general consumption, and not classed in the rank of nostrums. Possibly they might have succeeded, but the very great press of business of the utmost national importance, which at that time occupied the attention of ministers prevented an opportunity of a discussion on this subject, with them; but the Committee received from the Solicitor of the Stamp Office, an assurance, "That lozenges, sold in ounces, half-ounces, &c. should not be considered as chargable with the stamp duties, provided those lozenges were sold without any printed or written paper or hand bill, expressive of their properties or virtues in the cure of any disease; but if any paper whatever, describing their properties, should be delivered with them; or if any person should vend lozenges, generally understood

stood to be, or to have been formerly,* secret compositions in the hands of particular persons, such would certainly be deemed liable to the duty."

This, as I have said before, is a very small boon, and places the dealers in this article, wholesale as well as retail, in a very awkward situation.

If peppermint lozenges are a simple article of confectionery, never claimed as a secret by any one, they should have been exempt from a stamp duty, which will bear very hard on the wholesale dealers and those who sell in larger quantities than an ounce; *little* dealers are allowed, *speciali gratiâ,* and as an indulgence, that which both little and wholesale dealers should have enjoyed *de jure,* an exemption from stamps on that article, and a few others in the same predicament; but in the hurry of national concerns, it is impossible to give attention to minutiæ.

Issue plasters, which were in the former schedule, are left out; informations under the old act were always quashed by the magistrates, as it seemed agreed that these were no more than a *bandage,* and not a medicine. But if sold with a bill, intimating that they cure corns, or have any other specific virtue, they are certainly liable. This it is proper apothecaries should be apprized of, as they are an article sold by every apothecary who keeps a retail shop.

Plaster, black, Court Plaster, is not in the schedule, and may be safely sold unstamped, although sold with stamps

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* Tolu *Lozenges,* for instance. Every one knows how to make these; but the informers have made, under the old acts, a greater harvest out of this one article, than all other medicines put together; and many thousand pounds have been wrung out of the pockets of poor apothecaries who were ignorant that these were a stampable article. What led to the Tolu lozenges being a favourite bait with informers, was, the circumstance that the magistrates themselves were divided in their opinion; for, at one office, magistrates would not convict, because no one pretended it was a secret; whereas, at the next office, the justices remembered that it had once been a patent medicine, and therefore conviction followed of course.

This villainous tribe of gentry, taking advantage of this difference of opinion, when they had marked any one for their prey, used to purchase a box of Tolu lozenges and lay their information at some office where they knew it would be quashed. After thus plausibly inveigling the apothecary into an opinion that he might be perfectly safe in future in selling his Tolu lozenges without stamps, in some short time after, different faces, belonging to the same gang, would come to the same shop, and purchase two, six, or perhaps a dozen boxes, one at a time; and then lay separate informations for each box; making sure it should be at some office where they knew from past experience, conviction would be certain. Many hundred apothecaries have been robbed in this manner.

stamps by some who find an interest in getting off as many as ever they can, as the discount on taking very large quantities renders the stamps a very profitable article of *trade* to them.

Relfe's suckling assistant. A mechanical contrivance, and one of the most admirable ever devised for the relief of that part of the creation from whom we derive our greatest comforts, and who merit all our kindness and attention at all times, but especially when labouring under that most painful and distressing complaint, sore nipples. This was one of those articles of the schedule which, though not belonging to the Pharmacopœia, I took the liberty of animadverting upon, and marking as an improper subject of taxation. The inventress, whom I understand to be a sensible and skilful midwife, rather merited a handsome reward for her ingenuity, than to have a tax, and that, one that confers disgrace, imposed on her invention. As well might umbilical trusses, wooden legs, artificial noses, silver palate-pieces, laced stockings, fleecy hosiery, and every item of the stocks in trade of Mess. Sleath, Eddy, Sheldrake, and every other disciple of Taliacotius, be deemed quack *medicines*, and rendered liable to the stamp duty. Mrs. Relfe's machine is very properly exempted, since the act has been amended, from the stamp duty.

Red pills. Tooth-ach pills. So great was the panic struck by the act in its unamended state, that I positively know an apothecary who lost a few shillings by refusing to make up a box of pills, in which cinnabar. factit. was a principal ingredient, for fear the customer should inform against him for selling *red pills*; and the same person feared to dispense an opium pill to a stranger, lest it might cost him ten pounds on its being sworn to being sold as a TOOTH-ACH PILL! These, and as I have before observed, most other medicines indefinitely described, are omitted, and no danger attaches, unless the vender characterizes such as empirical remedies.

Troches of all sorts. To the apothecary who is attached to this almost obsolete form of medicine, it may be interesting to know that the omission of the word *troches* altogether, in the amended schedule, wholly exonerates him from any fears on that score.

Tinctures for the teeth and gums. By some oversight, in the hurry of other business, the above words stand part of the new schedule; but as the committee have received assurances that the commissioners of the stamps will never encourage

encourage any vexatious suit, nor suffer the act of parliament to be strained beyond its just and fair limits, no apprehensions need be entertained by the apothecary acting in the fair and regular way of business.

The assurances already stated to have been given by the Solicitor of the Stamp-office on the part of the Commissioners, renders it unnecessary for me to specify every item of the old schedule, exonerated by that which is now in force, from a stamp duty. It may however be expedient for those whom it concerns, to possess *both* schedules; accurately mark wherein they differ, and particularize in the latter, such articles as they may be dealers in.

In taking a summary view of the whole, I have to congratulate the regular practitioner in pharmacy, and the retail apothecary in particular, upon his liberation from the dangers and apprehensions which the act of 1802 subjected him to; and all this, *free of expence*, as I may say: the druggists, who are not quite so far benefited, having borne nineteen twentieths of the expence of getting the business of the AMENDMENT through parliament; comprehending,

1. The exemption of *unmixed* drugs from a stamp duty.
2. The taking the business of prosecution out of the hands of *common* informers, and confining it to the Stamp-office and Attorney-general.
3. The obliging the informer to bring his action in *three* months instead of *six* months.
4. The allowing the magistrate to mitigate the penalty to *one fourth* instead of *one half*; and,
5. The exclusion of all articles from the schedule, indefinitely expressed, and which would, by being retained, endanger the practice of the regular medical practitioner.

The druggists, however, still labour under some hardships and inconveniences: In compliance with the wishes and instructions of their constituents, the committee essayed for a total repeal.—Had the druggists been less intent on obtaining this, and testified a greater readiness to give assistance to ministers in framing an amelioration of the act, the few exceptionable parts of the act, which still remain, would have been done away.

It would be injustice to conclude this paper, without paying a tribute of thanks to those Gentlemen, to whom in the course of the business, it was necessary to make application.

The Commissioners of the Stamp-office were easily accessible, and their deportment towards those who applied to them was marked by that liberality which characterizes the

the gentleman. To Mr. Addington and Mr. Vansittart, many thanks are due for the readiness with which they granted conferences, and the attention they paid to what was laid before them by the deputations of the committee appointed to wait on them; as also to Mr. Estcourt, Solicitor of the Stamp-office, for his very great attention and patient consideration of every particular in the many interviews held with the members of the committee.

To the Lord Mayor, (Mr. Alderman Price) to Mr. Alderman Combe, and to Sir John William Anderson, members for the City of London, and to Isaac Hawkins Browne, Esq. M. P. for their easiness of access at all times, their polite attention, their patient hearing, their useful advice, and their friendly support in parliament, that gratitude, which on all occasions they have a just claim to from their fellow-citizens, is, on this occasion, most justly their due!

I am, &c.

W. CHAMBERLAINE, Surgeon.

Aylesbury Street, Clerkenwell,
August 12, 1803.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE late prevailing epidemic, *called the Influenza*, made its appearance in our neighbourhood in the month of April; but in the two following months, May and June, it was by far the most prevalent. I have also seen several well marked cases of it so late as the latter end of August: from the observations I made of it, I am induced to think it not contagious. My own servant boy, the latter end of June, felt the effects of it very severely for about ten days; the remainder of the family, eight in number, (though no precaution was observed to prevent intercourse) did not apparently receive the least inconvenience from it. From which, and several similar instances, I had strong reasons to suppose its contagion atmospheric, and not communicable from person to person. The epidemic shewed itself both pneumonic and of the low typhoid kind; *but the latter* was the most prevalent form of it: the medicines which I made use of in general were the aq. amon. acet. *or the alkal. volatil.* well saturated with lemon juice. As to antimonials, in a few cases which I thought strongly indicated

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the use of them, and which, in similar cases, I had seen good effects from, evidently did harm. Opiates, particularly when the disease pertained to the typhoid kind, I found pleasing effects from. The few cases which proved fatal under my care were taken off between the fourth and the seventh day.

I am, &c.

Storsforth, Yorkshire,
Sept. 11, 1803.

J. STABLES.

Case of a WOUND *in the* OMENTUM; *communicated by* J. STABLES, *of Storsforth, Yorkshire.*

J. G. a boy about twelve years old, received a stab from a sharp pointed knife, which penetrated the abdomen, about five inches obliquely above the right ileum. When I got to him, which was about an hour after the accident, I found a large portion of omentum protruding through the wound in his body, whose aperture might be about two inches in breadth. The lad had lost a good deal of blood when I got to him, from an artery in the omentum, which I secured as soon as possible, by needle and ligature, leaving a sufficient length of ligature, when the omentum was returned, to hang out below the orifice of the wound. Not finding the omentum much hurt, after washing from extraneous matter, &c. I returned it with all possible speed into the abdomen, and closed the wound with a suture and empl. adhesiv. &c. Gave him a large dose of opiate immediately, and the next morning opened his bowels with a solution of the sal. cathart. amar. For the first two days he went on very well; but on the third morning, I found him with strong febrile symptoms upon him, and complaining of a good deal of pain in his body. On examination, I found tension and inflammation had taken place over the lower part of the abdomen to a great extent. Having lost a good deal of blood from the wounded artery, and being a delicate boy, and considering the state of his pulse, I did not think it proper to deprive him of any more blood, but confined my treatment to the diligent use of emollient fomentations and poultices over the abdomen, and the frequent use of emollient enemas, &c. and opiates p. r. n. By persisting vigorously in the above antiphlogistic plan of treatment, the inflammation was unexpectedly subdued, and terminated in a state of suppuration. I opened the abscess and let out a large quantity of matter and coagulated blood, and also

two

two large portions of omentum came away along with it at different times; after which nothing unpleasant took place. By the use of common dressings to the wound and the free use of the cortex, and a generous diet, the boy, in the space of about a fortnight, got quite well.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE communication in your last number, subscribed E. O. on the salutary efficacy of reduced temperature in rheumatic or gouty affection, is so pointedly in support of the treatment proposed by me, for the prompt and effectual cure of that malady, as to induce me to trouble you to request of the author his real signature, that no possible suspicion may attach to its authenticity from its appearing anonymously.

Such a detail of facts is truly valuable, and should possess every external claim to implicit admission as correct medical evidence.

A knowledge of the intelligent author's name will enable me to incorporate his case with many others, in an appendix to a work on Gout, now preparing by me for speedy publication. In the mean time, the transmission, either to your Journal or to myself, of any farther experience on this interesting subject, cannot fail to extend and improve the object of my inquiry.

The success of the treatment under my own direction continues to exceed my most sanguine expectation, and promises soon to acquire it a very general and confident adoption. I am, &c.

Taunton, Sept. 8, 1803. ROBERT KINGLAKE.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE anonymous attack upon the small communication of mine, which you honoured with an insertion in the fifty-second number of your Journal, although it is very derogatory

rogatory to my wish to intrude useless controversy upon the public, I look upon myself, in justice to my own feelings, warranted in making a short reply to.—At the time I offered the result of my experiments on taking metallic casts of the ear to public notice, I was very well aware, and I believe observed, that some persons had been successful in performing operations of a similar nature; one of whom, to my knowledge, was so fearful of spreading his information abroad, that, when solicited to communicate the process which had rendered his own experiments fertile, he refused to do it. As I never studied anatomy in Windmill-street, or heard Mr. Cruikshank or Dr. Bailey deliver their lectures on the art of making anatomical preparations, I would by no means presume to say that those gentlemen were not acquainted with a method similar to that which I recommended, and which, as I have before asserted, occurred to me, after making a variety of experiments; I can only observe, that of several gentlemen of great observation, with whom I am intimate, who regularly attended the lectures of the above justly celebrated professors, (one I believe for five years) not one knew any more of injecting the temporal bone, except, that it was requisite it should be calcined in a fire, and have a melted metal poured into its cavities, the nature and composition of which they were totally unacquainted with. To exculpate myself from any imputation of plagiarism, I have only to observe, that nothing in print ever met my eye, nor did any observation in lecture ever meet my ear, inculcating any way similar to what I have recommended: indeed, a very celebrated anatomical lecturer, with whom I was house pupil, was very anxious to become acquainted with a successful method of injecting this organ. These circumstances, with the detestation in which I have held a secret-monger in science, were my sole inducements for laying my plan before the numerous circle of your readers. I have several times used pipe clay as a luting; but from its liability to become detached from the surface of the bone and fly into pieces, as a gentleman, who assisted me in some of my experiments witnessed, I have never been able to succeed with it. As the Paris plaster luting, with the greatest care and attention in previously drying the bone, will sometimes crack, I conceive the crucible enclosure would afford a valuable protection to it. The oxydation of the metal, which always occurs from its exposure to the atmosphere, may be prevented by laquering the cast over with a varnish

composed

composed of alchohol and gum mastic, or sandarac, in the way that philosophical instrument-makers preserve the metallic surfaces of their instruments.

Tavistock-row, Covent-garden, I am, &c.
August 3, 1803. ROBERT LOW.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

IN the Tenth Volume of your Medical and Physical Journal, No. 54, I have observed a few remarks on the method of obtaining metallic casts from the osseous cavities of the human ear.

Your correspondent, under the signature of REMEMBRANCER, expostulates with Mr. Low, on the originality of the invention of such casts. The result is, that he attributes the invention to Mr. Carlisle, surgeon, London.

Perhaps it may not be deemed intruding, to assert for myself, a supposed claim of precedency in preparing casts of the same parts.

In the year 1786, I advertised in York, a short course of anatomical lectures, &c. addressed to gentlemen of the profession, and to others of a philosophical turn. In that course, I shewed several preparations of the ear in wax; and in the lectures upon the organ of hearing, I demonstrated publickly the mechanism of the ear upon them.

Not having then prepared any in a more durable way, I recommended them to be prepared in some metallic form, or in plaster of Paris. But my recommendation I never fulfilled, although such was my intention.

The preparations then exhibited, I now have, some in a less perfect state than others, but sufficiently preserved to assert the fact.

I do not wish to detract in the least from Mr. Carlisle's claim to the invention; it is possible that two persons may have the same suggestions on like occasions.* There is notwithstanding, a certain degree of justice due to the industry

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* John Hunter informs us, in his account of the organ of hearing in fishes, that he had prepared that organ by injection with wax and metals, prior to the year 1760. That great man, of course, is evidently entitled to the original idea, at least in respect to the present competitors.

industry of a man, from himself. This justice I assert, and no more.

I had certainly formed these injected preparations some years before they were publicly shewn.* But, as I am well aware of the indecency of petty contentions of this nature, and how much they have, in many instances, disparaged both science and civilization, I shall content myself with the liberty of only noting a fact, which many persons have witnessed, and (allow me to add) not one can disprove.

Never having seen any preparation of the sort in London, where I resided some years, nor having heard of any such, I did mention at the time, my method as a new and convenient one.

Whilst I was making a preparation of the ear, a sudden thought at once suggested to me the idea of injection.

My method was—to cover the temporal bone completely with clay, then to inject that bone; all foramina being previously stopped, which were judged necessary.

In this state the bone was corroded.

The injection failed in some instances in the semicircular canals.

York, I am, &c.
Sept. 14, 1808. JAMES ATKINSON.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

I Take the liberty of communicating to you, a few observations on a late publication, entitled, "The Natural History of the human Teeth, by Mr. Joseph Fox.

In page 32, 33, and 34, the author labours to establish a new system of his own, which is the vascularity in the solid substance of the teeth.

Page 32, he says, "There is another set of vessels called absorbents, of the existence of which, in the structure of common bone, I believe there is no doubt, and on account of certain effects produced upon the teeth, we must conclude that they are not destitute of them."

This

* Either in the year 1782 or 1783, I know from circumstances.

This is not conclusive; the author knows that the teeth have not the same advantage in the animal economy that other bones have; their formation, growth, and manner of ossification, differ from all other bones, and therefore must be considered as different in their nature and action. They have neither a cartilaginous nor a membranous base to form on, but on a pulp peculiar to themselves; they are not cellular, but compact in their structure, and cannot be considered as other bones.

In the same page the author says, "In some cases we find the teeth undergo the ulcerative process, and a considerable quantity of the inner part is removed; a circumstance which could not happen, unless there were absorbents entering into the cavities of the teeth, and properly belonging to them."

This circumstance, in my opinion, is occasioned by a different process, and arises from distinct causes, though similar in their action and effect. One is, when the vessels and membrane, which are in the cavities of the roots, become inflamed, suppuration takes place, and the pus so formed cannot be removed from those parts, as they have no absorbents to take it up. Hence it becomes acrid, and destroys the internal texture of the tooth. The same process takes place, but in a greater degree, in young subjects, when the remaining pulp in the fang has not as yet finished the inner part of the tooth, and either from external violence or internal cause becomes disturbed; this process takes place, and a larger portion of pus is formed; and when such teeth are extracted, and a longitudinal section is made, the internal substance so decomposed, is found in the state of a moist black powder.

Further on, in the same page, the author advances as a conclusive argument in proof of the vascularity of the teeth, the following observations.

"Besides these instances, the effects of absorption in the tusks of elephants are often seen; sometimes in sawing these bodies, iron balls, spear heads, &c. are met with, which have been forced into them in attempting to kill these animals. These extraneous substances are always found loose, having a space in which they can be moved; this could never happen, unless there were some action going on, by which part of the bone could be removed; and there is no other mode in which it can be effected, but through the medium of the absorbent vessels."

This I consider as a feeble support of the author's system. But allowing for a moment the existence of absorbents, why

why does not the arterial system renovate the absorbed portion? As this is not the case, it is evident that the teeth neither possess the one nor the other.

But the small vacuity which allows motion to the iron bodies, in the part they are found, is easily accounted for, without having recourse to absorption.

When the animal was wounded, the ball, by its velocity, as it entered the substance of the tusk, must destroy the cohesive power of that part it comes in contact with; the animal lives for many years afterwards, and ranges about; the air is admitted into the orifice, and moisture also; rust forms on those iron bodies, and thereby their circumference is diminished, and at the same time destroys a portion of the bony lamella; of course, that orifice becomes enlarged, and allows motion to those bodies. Had the animal lived still longer, a larger portion of the bony substance would have been lost, so as to permit those bodies to drop out.

The teeth being deprived of animal vitality in their substance, cannot constitutionally be acted upon; all the alteration the teeth undergo, is from a chemical or a mechanical process, and can only be considered as a defect, and not a disease.

They never assume any of the diseases of the other bones, and the following argument will favor this hypothesis. They have no power to exfoliate any fractured portion, nor renovate their wasted substance. The gout, rheumatism, venereal disease, or the inveterate scurvy, do not alter their structure, nor does any ichor discharge from the diseased part; they form no exostosis, nor are they affected by the spina ventosa; they are only liable to one peculiar defect, which is a caries, and this from a chemical or mechanical process, and not constitutional. They are entirely passive, and have no power of resistance; the same process of decay takes place on the human teeth, supplied by art, or those made of the hippopotamus; this is decisive that the caries is not a constitutional disease.

Page 34, the author says, "A large quantity of blood is distributed to the teeth; this may frequently be seen in performing some operations. In cutting off the crown of a tooth, in which the caries had not spread to the fang, for the purpose of engrafting a new tooth, I have several times seen a discharge of blood from the internal cavity."

But in my practice, I have never seen, nor will the author say he has, that any blood was discharged from the solid

solid surrounding part of the fang, or body of the tooth, nor any sensation perceived, unless the instrument employed, came in contact with the vessels in the cavity. The lateral branches of those vessels are expanded on the internal membrane and there are lost, without entering the bony substance.

In the same page the author says, "Blood carries with it the basis of nutrition, and is sent to those parts only where renovation is necessary. For what other reason then but to impart some principle of nutrition, can so much blood flow into the teeth? If the teeth, after their first formation, received no supply from vessels, or did not require any nourishment, it would have been better if they had been destitute of an internal cavity, and of regular organization."

This will serve as an additional proof of the non vascularity of the teeth, as they never renovate any lost portion; their situation would not allow of that process, and the vessels would be useless; they must be considered in their substance as inorganized bodies.

As an additional proof, the author says, "It is always observed, that as persons advance in life, their teeth lose that whiteness which they possessed in the time of youth. This change in the appearance of the teeth seems to depend upon one which takes place in their cavities, by which the vessels entering them are gradually destroyed, and the supply of blood is proportionally diminished. In the teeth of persons advanced in years, the cavity is very frequently obliterated, in consequence of a deposit of bony matter, which entirely destroys the internal organization. When this happens, the teeth always lose their colour, and become very yellow."

But the alteration of colour which the teeth undergo, arises from a mechanical and chemical process. The friction on the bases of our grinders, occasioned by mastication, and by the friction of our lips, food, and by cleaning, diminishes by degrees the enamel on their surface and sides, and the bony part will appear through the enamel. The adult teeth, which during a long period of life have been acted upon by the juices of the mouth, heat of the body, by the various food, solid and liquid, undergo in addition to the mechanical operation, a chemical process, and by that means lose their primitive whiteness. And that teeth do undergo a discolouration in their substance, by a chemical process, may be seen by those who have accustomed

accustomed themselves to smoking, and particularly chewing of tobacco.

Page 35. The proof that the author further adduces for the internal circulation, is, "When a tooth has been loosened by a blow, and has afterwards fastened in its socket, a great alteration in its colour is the consequence; it gradually loses its whiteness, and acquires a darker hue, because it receives no longer any blood."

But the reason for the discolouration in this case, proceeds from an extravasation from the ruptured vessels, the blood lodges within the cavity, and acts as a foil to the bony part of the tooth.

When the absorption takes place in children's teeth, and they are of course cut off from the main branches of the vessels which supply them, they cannot receive any influx of blood, and still retain their primitive whiteness; but this is on account of their short duration, and the simple food on which children live during that period; no chemical action could affect them materially in so short a time.

The teeth are not liable to any disease but one, which is peculiar to themselves, namely a caries. This never begins internally, except in two cases already mentioned; the decay of the teeth has its origin always externally, which by small degrees destroys the attractive, cohesive power of the component parts, and that process goes on, sometimes very slowly, and at others with great rapidity.

When a tooth becomes carious, we are not apprized by any internal sensitive symptoms, we perceive no pain, as no diseased vital action can go on, and no pain is perceived till the cavity is laid open, and the air, or any heterogeneous particles, are admitted to come in contact with the vessels within.

The author says farther on, that "the teeth suffer like other bones, as they are subject to that species of inflammation, called the ossific; by this means the fangs become increased in size, and exhibit the appearances of exostosis.

But this appearance is a deception, and arises not from an inflammation, but is natural, or a malformation, and that it is so, may be seen by several sound teeth of all classes, which I have in my possession perfect without any defect, and some of very young subjects, recently formed, and which were extracted by myself, for want of room in the circle of the jaw.

Besides what the author calls an exostosis appearance, from the ossific inflammation, the same often appears, and of much larger extent, on the bodies of the grinders, bicuspides,

pides, and I have also a small incisor by me which has the same on the concave part of the body; and surely the enamel of those teeth could not have those appearances from an ossific inflammation.

If the fangs were capable of an increase by the ossific inflammation, they would increase at times to an extraordinary size, and the socket would not be able to contain them; according to its original formation, the tooth would become loose. I have extracted a number of teeth with those appearances, and all of them perfectly firm in their socket.

What has been advanced in the above pages, against the vascularity, will plainly demonstrate that the teeth are not vascular in their solid substance, and of course cannot become constitutionally diseased.

I am, &c.
SAMUEL MOOR.

No. 6, Palsgrave Place, Temple,
August 3, 1803.

CRITICAL ANALYSIS
OF THE
RECENT PUBLICATIONS
ON THE
DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

A Concise History of the Autumnal Fever which prevailed in the Borough of Wilmington, in North America, in the Year 1802. *By* Dr. JOHN VAUGHAN. 8vo. pp. 32. Wilmington, (Del.)

A manuscript account of this distemper at Wilmington was sent, as we have understood, to Philadelphia for publication. The author was led to believe it would have been inserted entire in a collection of Essays then preparing for the press. But he was much disappointed to find that "a mutilated abstract only was published." After having asked some explanation from his correspondents concerning this manner of treating his performance, and obtaining but little satisfaction, he resolved to do himself justice by printing the whole under his own eye.

Though this is a short, it is an intelligent account of a disease which afflicted the place in which the writer resides, in the fall of 1802,

1802. It is a valuable piece of local medical history, drawn up by a physician who describes what he saw, and who lived through the scenes of calamity and terror which he witnessed. Dr. Vaughan has, however, not confined himself to a mere delineation of symptoms, and a recital of prescriptions; he investigates the origin and progress of the malady, and endeavours to trace it to some external or internal source. He declares that, with all his vigilance, he cannot discover it to have been brought from any place whatever, either by water or by land, by persons or by goods. He examines, with care, the allegations against a young woman, and a schooner, charged with having *imported contagion* into Wilmington, the former from Philadelphia, and the latter from Port Republican; and finds them quite unfounded in reality, no better supported than similar tales usually are. But we shall give Dr. V.'s own words. (p. 15.)

"On a review of the preceding narrative, it appears that the disease took rise in the narrow part of King Street and the adjacent district, progressing, with irregular steps, over the lower parts of the town, and finally encroaching on the district north of Third Street; but was principally confined to the district south-east of Market and Third Streets.

"The more prominent facts relating to the origin of the disease stand thus:—1. Ann Davidson, the only person who was or could be suspected of introducing contagion among us, came from Philadelphia in the beginning of August, to her father's house in King Street, and was reported to be affected with contagious fever on the 15th. She recovered, without suffering any of the more violent symptoms of malignant disease, and removed into the country.

"2. The family in which she resided consisted of ten persons, all of whom remained well until the 7th of September, when her mother had an attack of fever, after a journey of ten miles into the country, performed partly on foot, and partly in an open cart.

"3. In the mean time, T. Musgrove's son, Ann Hadley, Capt. West's girl, Mr. Cloud, and Hannah Robinson, in the same square; and R. Hagin's son, J. Warner's girl, E. Dale, and others, in different directions, were attacked with malignant fever.

"4. If Ann Davidson's disease were contagious, and the only source of future disease, is it not reasonable to suppose that some one or more of the ten persons, confined in a small house with her, would have been the first affected by the contagion? The reverse was the fact.

"5. The first serious alarm of malignant fever took place in the first week of September. The cases were principally, but not altogether, confined to King Street. The square between Second and Front Streets, whose filthy cellars *was* a matter of notoriety, and a subject of common complaint, was the more concentrated seat of disease.

"6. The cases specified evince a correspondency of dates, indicating the action of a common cause, and precluding the more slow and successive routine of human contagion, from one diseased person to another.

"7. The

" 7. The disease was suspended by the great change of weather which took place on the 5th of September, and resumed a formidable shape about the 9th, and became general in the southern district against the 25th of the month.

" 8. When the disease became alarming a second time, I personally inquired into the preliminary circumstances of every case that occurred, for the purpose of tracing their origin; and none of them could be reasonably imputed to contagion from the previously sick.

" 9. The disease was evidently subservient to the states of the weather, in declining in frequency and force in warm clear weather, and re-assuming a formidable shape on every change to coolness and moisture of the atmosphere.

" On the most liberal view which can be taken of the rise and progress of the disease, with an unrestrained examination of the facts, as they occurred, I see no reason to suppose the insidious malady was of foreign origin, or specifically contagious. On the contrary, I am firmly impressed with the belief, that it was the endemic fever of Autumn aggravated to a pestilential grade, by local filth, and the tropical state of the season, in conjunction with an epidemical state of atmosphere, which appears to have influenced the diseases of our country since the memorable year 1793. This belief is further predicated on the following facts and inferences:

" 1. An epidemical state of atmosphere, favouring the occurrence of malignant fever, was evinced by the usual premonitary forms of disease.

" The measles were epidemic in the fall of 1801, and declined during the winter, giving place to the scarlet fever. The last winter was unusually mild, which gave birth to the swellings of the glands, croup, and the influenza, in April and May, 1802. June was, as usual, comparatively healthy, but chequered with some cases of cutaneous disease. In July the putrid sore throat occasioned considerable alarm; and, during the latter part of July and early part of August, the eruptive state of fever was extremely afflicting to children, and seemed to supercede the ordinary appearance of cholera infantum. In some cases general ulceration of the glands of the neck and axillæ were so obstinate as to require a complete course of alterative remedies.

" 2. The season became tropical in the middle of August. The weather, from being uncommonly cool, suddenly became extremely hot, varying from 80 to 90 degrees, with frequent gusts of rain and lightening. In the evenings of the 29th, 30th, and 31st, there were excessively violent thunder-storms from the westward, with torrents of rain. It was remarkable, during the autumn, that all our sudden and violent rains came from the westward, and commonly extended but a few miles along the Delaware. In misty weather the wind was mostly north-east. But the winds were unusually variable, not unfrequently traversing the compass in twenty-

twenty-four hours. The changes of the weather were proportionally sudden.

"3. Myriads of mosquitoes infested the lower parts of the town from July until frost, having gradually diffused themselves over the borough in September. The eldest of our inhabitants do not recollect this insect being troublesome here in any previous season; while the unanimous report of persons from the fenny counties of Kent and Sussex, the annual haunt of these winged pests, was, that they were unusually free from them.

"4. The sources of noxious effluvia in the southern and flat part of the town were much increased by a regulation, but partially executed, for bringing the streets to an uniform descent from the summit of the hill. A number of cellars were filled with water; a new dock formed; and the gutters lowered in some places and raised in others, forming numerous depositories of filth. These circumstances, added to the nuisance in King Street, rendered the air of that quarter offensive to the smell in the day-time, and doubly so at night. After the 15th of September the air had a taint resembling bilge-water, especially after a light shower of rain and in the night, and more sensibly recognized by persons coming immediately from a higher region.

"5. The fogs which collected in the evenings were suspended on the flats during the nights, gradually becoming more compact in the mornings, and mostly passed off in a dense cloud towards the Delaware, between seven and ten o'clock. This semi-circuit of the fogs, from Market Street southward and eastward, was the seat of concentrated disease. Those fogs were condensed miasmata of fever in a familiar garb.

"The seat of disease was so well defined until the 15th of October, that the inhabitants north of Third Street felt but little apprehension; and, as the fogs became diffused, a few scattering cases of disease appeared, and removal was the only mean of safety.

"6. The poisonous matter exciting disease was evidently a constituent part of the fogs. Many persons visited the infected district in clear weather, and in the day-time, without injury, and several of the same persons contracted disease by a single exposure in the night-time, after the fog had collected. It also is remarkable, that the disease generally attacked in the night-time.

"7. The non-contagious nature of the disease was repeatedly attested by persons sickening after removal from the lower to the higher parts of the town, and being nursed with every attention, and dying without communicating the malady to their attendants. Also, two sailors had the disease, on board of different vessels, at separate wharfs, without affecting their companions.

"It is not denied that the more malignant cases of disease may be incidentally contagious, or rather re-infectious, under circumstances favouring a new chemical combination of the venomous offsprings of filth and putrefaction.

"8. A noxious state of atmosphere was manifested by the lingering

ering state of convalescents who remained in the contaminated region, while those who removed into the country were speedily restored to health.

"9. The indigenous nature of the disease was evidently characterised by the ultimate sameness of every form and grade of fever. After the middle of September, the subordinate forms and grades of fever, not arrested within forty-eight or seventy-two hours, invariably passed on to the malignant grade of disease. No matter how slight the attack, nor who the subject, the livery of pestilence sooner or later appeared: and valetudinarians, cases of pulmonary consumption excepted, suffered in the common fatality.

"Lastly. The rise, progress, and confined state of the disease; the manner in which the fluctuating malady corresponded with the varying states of the weather; the non-communication of disease to the attendants on the sick, when out of the original sphere of infection; and the sporadic appearance of disease in other parts, after the more extended fog on the 15th of October; with the final termination of the progress of infection by a single frost—are, in my opinion, evidences striking as the nature of the case will possibly admit, that the multiform disease which afflicted us was not of foreign origin, not specifically contagious.

"I believe that a proper attention to the internal condition of this borough, and preserving the adjacent marshes in their present state of cultivation and improvement, by numerous drains, would be the surest means, under Providence, of securing us against a repetition of the calamity."

We think Dr. V. is entitled to much credit for the impartiality and intrepidity he has shown, and we hope his conduct will be an example to other gentlemen in the profession to observe, and relate what they shall see, with equal fidelity. We shall thus, by degrees, correct a considerable part of the errors which overhang the history of febrile distempers.

Practical Observations on Surgery, illustrated with Cases, by WILLIAM HEY, *Esq. F. R. S. Member of the Royal College of Surgeons, in London; Honorary Member of the Royal Medical Society of Edinburgh, and of the Literary and Philosophical Society of Manchester; and Senior Surgeon of the General Infirmary at Leeds.* London, 1803. pp. 537, 8vo.

THESE valuable observations are of a kind the best calculated of all others to render a real and essential service to the art which they illustrate. They contain some of the most important remarks on various parts of surgery, made by a practitioner of great and deserved eminence, who for many years has filled a leading station in his profession. Little scope is here given to conjecture, nor is any observation introduced, which has not the basis of personal experience, and both the character of the author and the internal

evidence which appears on the face of the work, give it the stamp of perfect authenticity.

The contents of this publication are a number of detached Essays on miscellaneous subjects of Surgery, given without arrangement or connexion with each other, and extracted almost entirely (as the author informs us in the preface) from his case-book, which he has been in the habit of keeping ever since his commencement of practice; a rich repository of excellent surgery to judge by the example before us! We shall take some notice of each Essay.

The first contains remarks on fractures of the skull. Mr. H. begins by objecting to a point of practice laid down by the celebrated Pott, in his excellent Treatise on Injuries of the Head, which is, that previous to the operation of trepanning, a portion of the scalp large enough to allow of the examination of the fracture, and the free employment of the trephine, should be actually removed by the knife. To this Mr. Hey objects with propriety, as unnecessary and injurious, inasmuch as all the advantage to be derived from a free examination of parts, may be gained by a large crucial incision into the scalp, and the natural integuments still remain as a covering to the bone and dura mater, after the operation. Indeed this method is so consonant to general experience, that we believe it is now almost universally adopted, and we may with reason be surprized at this maxim of one of our most excellent surgical writers, since, in other parts of the same essay, he is very explicit in directions for saving the scalp, when injured, if there is the least chance of its being brought to re-unite to the skull. A very important improvement in the instrument for removing the necessary portion of the cranium, is next given by our author. It is to substitute a flat, straight, or flat convex saw to the circular instrument in common use. In truth, it must be acknowledged to shew a great want of contrivance to employ only a single method of working on the cranium to be adapted to all accidents of this bone; and, considering this operation in a workman-like manner, we think that much benefit may be derived from the proposed improvement; we shall give the author's words:

"When a broken fragment of bone is driven beneath the sound contiguous part of the cranium, it frequently happens, that the extraction cannot be executed without removing some of the unbroken part, under which the fragment is depressed. This might generally be effected with very little loss of sound bone, if a narrow portion of that which lies over the broken fragment could be removed. But such a portion cannot be removed by the trephine. This instrument can only saw out a circular piece. And as, in executing this, the central pin of the saw must be placed upon the uninjured bone, it is evident, that a portion of the sound bone, greater than half the area of the trephine, must be removed at every operation. When the broken and depressed fragment is large, a repeated application of the trephine is often necessary, and a great destruction of sound bone must be the consequence.

 "When

" When the injury consists merely of a fissure with depression, a small enlargement of the fissure would enable the surgeon to introduce the point of the elevator, so as to raise the depressed bone. But a small enlargement of the fissure cannot be made with the trephine. When it is necessary to apply the elevator to different parts of the depressed bone, a great deal of the sound cranium must be removed, where a very narrow aperture would have been sufficient.

" The same reasoning will apply to the case of openings made for the purpose of giving a discharge to extravasated blood, or matter.

" If a saw could be contrived, which might be worked with safety in a straight, or gently curvilineal direction, it would be a great acquisition to the practical surgeon. Such a saw I can now with confidence recommend, after a trial of twenty years, during which time I have rarely used the trephine in fractures of the skull."

Some very satisfactory cases are added, to shew the superior advantage of this instrument to the circular saw, which applies more peculiarly to those instances of fracture with great depression, where the injured bone is not loose enough to be removed by the forceps, and must therefore be got at by means of perforating the sound contiguous part of the skull. Two cases are also given, in which this saw was used with advantage in a necrosis of the tibia to separate the diseased portions of bone.

The cataract of the eye is the subject of the next Essay, on which the author has evidently bestowed much attention. The leading object is to recommend the operation of couching in preference to extraction, though indeed the author's experience hardly allows him to draw the *comparison* between the two methods, as it has been almost entirely confined to the couching needle. The instrument employed by Mr. H. differs in some material points from the needle commonly in use, being much shorter, smaller, and not spear pointed, but more resembling a common awl. The following is the exact description of it: " The length of the needle is somewhat less than an inch. It would be sufficiently long if it did not exceed seven-eighths of an inch. It is round, except near the point, where it is made flat by grinding two opposite sides. The flat part is ground gradually thinner to the extremity of the needle, which is semicircular, and ought to be made as sharp as a lancet. The flat part extends in length about an eighth of an inch, and its sides are parallel. From the place where the needle ceases to be flat, its diameter gradually increases towards the handle. The flat part is one-fortieth of an inch in diameter. The part which is nearest the handle is one-twentieth of an inch. The handle, which is three inches and a half in length, is made of light wood stained black. It is octagonal, and has a little ivory inlaid in the two sides, which correspond with the edges of the needle."

The advantages which the author describes as resulting from this

form of the instrument, are, first, that its length is so nearly adapted to the dimensions of the natural eye, that the surgeon can better judge of the direction and extent of the wound when he is unable to see the point. Secondly, that as the needle becomes gradually thicker towards the handle, it will remain fixed to that point of the sclerotis to which it has pushed it, and will give the eye more steadiness during the depression, and will also prevent the escape of any part of the vitreous humour. Thirdly, that as it has no projecting edges, like the spear-shaped needle, it will be less liable to wound the iris or ciliary processes; and fourthly, that having no projecting point, it will not readily injure the edges of the pupil during the motion of depression, which the common needle is apt to do.

The description of the operation with this instrument is clearly expressed, and very precise. It does not differ materially from that of other operators. Mr. H is in the constant habit of couching the right eye with the left hand, and to acquire this ambidexterity, he gives the useful advice to the surgeon to accustom himself to bleed with the left hand.

The testimony of our author to the excellence of this operation is indeed strong and irrefragable, and certainly ought to have due weight against the opposite testimony of some very eminent oculists, who uniformly prefer extraction. The peculiar characteristic of Mr. Hey's practice in this operation, (besides the form of the instrument) is that of caution in not attempting too much at first, and he does not hesitate to leave a great deal for future operations, rather than endanger the safety of the organ by violent inflammation. Thus we find, in the cases which are subjoined, the operation repeated as often as twelve times, and gaining ground by slow degrees in removing the opacity, attended finally with perfect success. It is owing to this caution also, that Mr. H. has been enabled to operate successfully even in partial adhesions of the iris, and in other cases of difficulty, which in general have been thought to forbid the use of the needle. Baron Wenzel, in his valuable treatise on this disease, mentions as an objection to couching, that "the pain produced by the puncture of the retina and the ciliary nerves, is often followed by a suppuration of the eye." Our author's answer to this objection is worthy of remark.

"I have now practised the operation of couching pretty frequently for thirty-three years, though I have not kept a list of all the patients upon whom I have operated. I have also seen the operation performed frequently by my colleagues at the Leeds Infirmary; but never yet saw an instance of a supparation of the eye, in any patient who has come under my care in private practice, nor in any case that has occurred at our public hospital."

Now, if in the course of a practice so extensive as Mr. Hey's appears to have been, and with very frequent repetitions of the operation on the same subject, no such mischief as Baron Wenzel threatens

threatens has ever occurred, we must allow this hazard to be much over-rated.

Little is added to the pathology of the disease in this Essay, except to shew from actual experience the fallacy of several of the diagnostics of hard and soft cataract, curable and incurable, which several authors have attempted to establish.

In the third Essay the disease of strangulated hernia is considered. The first treatment of this disease does not much differ from that in common practice. Bleeding is advised only in very full plethoric habits, purgative medicines always to be avoided, opiates used very freely, and especially tobacco clysters. The experience of sound surgery will, we apprehend, agree with our author in advising an early operation. We shall give his words:

"When I first entered upon the profession of surgery, in the year 1759, the operation for the strangulated hernia had not been performed by any of the surgeons in Leeds. My seniors in the profession were very kind in affording me their assistance, or calling me into consultation when such cases occurred; but we considered the operation as the last resource, and as improper until the danger appeared imminent. By this dilatory mode of practice I lost three patients in five upon whom the operation was performed. Having more experience of the urgency of the disease, I made it my custom, when called to a patient who had laboured two or three days under the disease, to wait only about two hours, that I might try the effect of bleeding (if this evacuation was not forbidden by some peculiar circumstances of the case) and the tobacco clyster. In this mode of practice I lost about two patients in nine upon whom I operated. This comparison is drawn from cases nearly similar, leaving out of the account those cases in which a gangrene of the intestine had taken place.

"I have now, at the time of writing this, performed the operation thirty-five times; and have often had occasion to lament that I had performed it too late, but never that I had performed it too soon. There are some cases so urgent, that it is not adviseable to lose any time in the trial of means to produce a reduction. The delay of a few hours may cut off all hope of success, when a speedy operation might have saved the life of the patient."

The part which causes the strangulation in femoral hernia, Mr. Hey asserts, is not Poupart's ligament, but another ligament, to which he gives the name of *femoral*, running nearly in the same direction as Poupart's, but rather in an ascending direction, and situated below and behind it. A plate of this ligament is given. Here the author also refers to the treatise of Gimbernat, who has described these parts with great accuracy.

Many cases are added to this very important chapter, and the author, in particular, insists upon the care to be taken in disposing of the omentum in the operation for hernia, and the hazard

 incurred

incurred by hæmorrhage of this substance, when returned into the abdomen with the vessels not properly secured.

An account of two uncommon varieties of hernia, one of the congenital scrotal kind, and the other of the umbilical, conclude this subject. *(To be continued.)*

Experiments and Observations on the Cortex Salicis Latifoliæ, or Broad-leafed Willow Bark; illustrated by a coloured Plate, interspersed with general Observations and Remarks on the different Species of the Cinchona, &c. General History and progressive Introduction of the Salix Latifolia; with a Variety of Experiments, tending to elucidate its Properties. Illustrated by Cases demonstrating its superior Efficacy above the Cinchona in various Diseases, more particularly that Branch of the Healing Art, termed Medical Surgery; by G. Wilkinson, Member of the College of Surgeons, London, &c. Newcastle upon Tyne. 8vo. pp. 118. 1803.

The virtues of the various species of willow bark have long been ascertained and fully established, but the salix has not hitherto been formally received into our materia medica. In 1792, Mr. James, of Hoddesdon, in Hertfordshire, published a pamphlet recommending the salix latifolia (caprea) in strong terms, as a substitute to the cinchona; and in 1798, Mr. White, apothecary to the Bath Infirmary, added a valuable testimony to the efficacy of this bark. The author of the treatise before us has done the same, and has attempted to shew, by chemical experiments, the ground of its excellency.

The sensible properties of this bark are, in smell, scarcely perceptible; in taste, considerable astringency with a slight degree of bitterness, which last however goes off almost entirely on drying. It is in the *astringency alone* that the medicinal virtue of this bark seems to reside, and the whole object of the author's experiments is directed to this point. Indeed, his whimsical motto from the grave-digger's scene in Hamlet, is an indication to the reader what to expect. "A tanner will last you nine years." "Why he more than another?" "Why, sir, his hide is so tanned with his trade, that he will keep out water a great while."

The author gives a number of comparative experiments on the quantity of tannin contained in the following vegetables; the tormentil root, oak, cinchona of each species, angustura, and the willow bark in question. He determines their antiseptic property by their effect on animal flesh in retarding putrefaction; their tanning power, by immersing pieces of skin in the different solutions; and the actual quantity of tannin by the very accurate method of precipitation with animal jelly. In all these he finds the power of the salix to stand very high, only inferior to the tormentil. In some instances we think the author has attempted too general inferences from the result of his experiments, which, however, it is but justice to observe, appear to be conducted with propriety and great impartiality.

That

That the willow bark, properly administered, will cure intermittents, will have a salutary effect in supporting the strength of the constitution under copious suppurations and other debilitating circumstances, is what we do *not* in the least doubt; but the question more particularly agitated by the author is, the *preference* which he claims for it over the cinchona. On perusing the cases which he gives, some will be found quite unsatisfactory, *from the irregularity of the patients*; and in those in which the willow bark was of obvious utility, we must confess, that it appears to us that the cinchona, *if genuine and good*, would have produced the *same benefit* in much less time, provided the patient would have taken it regularly. We must therefore acknowledge the fairness of his cases, at the expence of the inferences which he would deduce from them. As the salix possesses scarcely any sensible *bitterness*, the author evidently is led to undervalue the efficacy of this principle, and yet with some little inconsistency, but (we believe) with practical propriety, he occasionally recommends the addition of quassia to the willow bark, as increasing its virtues, and making it strongly resemble the cinchona.

The great price of this excellent foreign drug, and the extensive and shameful adulterations to which it is often liable, render it highly desirable to increase the number of its substitutes, and to ransack all our fields and woods for indigenous vegetables which may be possessed of similar properties. Perhaps though no single vegetable may unite in itself the powers of the cinchona, a judicious combination may be found to answer the purpose, and the salix certainly deserves a place in our materia medica. Mr. W. exhibits it entirely in the form of decoction, for which the following is his formula.

"℞. Corticis salicis latifoliæ siccati ℥jß in pulverem crassum redige, et macera in aquæ fontanæ libris duabus per horas sex; deinde coque leni igne per quartam vel tertiam partem horæ; et cola pro usu. Capiat æger cochlearia duo vel tria larga decocti ter vel quater de die; sed febre intermittente, dare oportet unciam unam aut duas secundâ vel tertiâ quaque horâ absente paroxysmo."

Practical Observations on the Management of Ruptures, by WILLIAM HALL TIMBREL, Esq. *to which are prefixed Two recommendatory Letters, by* WILLIAM BLAIR, A. M. Member of the College of Surgeons, &c. &c. Octavo, pp. 94. London, 1803.

THIS little work is published under the sanction of Mr. Blair, and the approbation of the Society for the Encouragement of Arts, Manufactures, and Commerce, which has honoured the author with their gold medal.

The following directions are given for reducing a rupture:

"In cases of strangulated intestine, or of stricture, the patient should lay on the side of his body *contrary to* that on which the rupture is; by which position, there must be a *lateral* recession of

pressure

pressure from the aperture, which will give ease when the intestine or omentum cannot from inflammation *return* through the aperture.

"Another position, in cases of difficulty, is to lay upon a chair with its back on the floor, the patient's heels to be placed against the wall, and his head on the ground.

"Let the breath be held in, before an attempt is made to reduce the bowel; for the acts of breathing and speaking, contribute to force down a rupture.

"Cover the fingers with your shirt or handkerchief, by which means the rupture is gathered up with more certainty and dispatch.

"To render the practice easy to every one, I use the expression *knead* the bowel upward through the aperture, as dough is *kneaded*;* but during a state of inflammation, press upon the intestines very gently, if at all.

"By comparing the ruptured side of the body with the sound side, it may be seen and felt when the rupture is reduced.

"Method makes every thing easy, therefore observe the following directions in the *order* in which they are placed;

"1. Lay down. The head is to be lowered, and the knees to be drawn up, or the heels to be raised.

"2. Hold in the breath.

"3. Be perfectly silent.

"4. Cover your fingers with the shirt or handkerchief.

"5. *Knead* up the rupture.

"6. Put on the cushion and truss.

"7. Draw the thigh strap under your thigh *very tight*, and buckle it to the pad."

The author lays the greatest stress on the immobility of the cushion, which he recommends to be made of callico.

MONTHLY REPORTS.

Cases admitted under the Care of the Surgeon of the Finsbury Dispensary, St. John's Square, Clerkenwell, from August 10, to September 10, 1803.

Phlegmone - - - -	1	Fractura Ulnæ - - -	1
Abscessus Artuum - -	3	Vulnus - - - - - -	1
———— Maxilla - -	1	Luxatio Humeri - - -	1
Mastodynia - - - -	4	Lues - - - - - -	3
Hernia Humoralis - -	2	Gonorrhœa - - - -	2
Ulcera Cruris - - - -	11	Scrophula - - - - -	3
Leucoma - - - - -	1	Ascites - - - - - -	2
Contusiones - - - -	9	Hydarthus Genu - - -	2
		Sarcocele	

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* In the act of kneading, the fingers are to be extended and drawn forwards, gently and shortly.

Sarcocele - - - - -	2	Psora - - - - - - -	1
Hernia - - - - - - -	5	Eruptio Chronica - -	1
Prolapsus Ani - - -	1		—
Arthrodynia - - - -	3	Total -	60
Tinea - - - - - - -	3		—

A few months since, some observations were made by the Reporter respecting applications of a cold nature to local inflammations of a specific kind, as Gout and Rheumatism, which are generally considered as diseases whose existence should be rather encouraged than repelled, and which are thus very commonly protracted to a very tedious length.

We are much indebted to a physician of great discrimination and ability (Dr. Kinglake) for the remarks and relation of facts on this subject, which have recently been presented to the public by the medium of the Medical and Physical Journal, and whose assiduity in the collection of well substantiated cases, in which similar treatment has been pursued with success, will in all probability add much to our knowledge with respect to the nature of these diseases, and to our capability in the removal or mitigation of them.

Several cases have come within my knowledge, since those which have already been alluded to, in which the frigorific process has been attended with manifest advantage in recent cases of Gout and Rheumatism, or in such cases as are evidently accompanied with vigorous action, and inflammation of the sthenic character; in no one of the cases in which this treatment has been pursued, has any ill consequences succeeded to my knowledge; yet these certainly cannot be considered as sufficient evidence to prove its validity in all cases, but sufficient to warrant a continuance of the experiment in all cases of the above description.

A surgeon of considerable practice in this metropolis, a man of real professional ability, who has been a martyr to the pain and confinement of the Gout, is continually in the habit of arresting its progress when he has an opportunity of performing it sufficiently early, by a practice of this kind. When he perceives the approach of his enemy, he goes to the Thames, and making bare his legs and feet, immerses them in the river from the side of a boat, in which he is rowed about for a considerable time, which seldom fails of producing the effect required.

Several cases which have come to my knowledge, in which the feet have in the commencement of the attack of Gout

Gout been accidentally exposed to cold and moisture, with with great advantage, further tend to justify the belief that such treatment will in a great variety of cases prove beneficial; though from the contrary nature of its operation to the plan which has for the most part been hitherto adopted, it is probable that much time must elapse before the remedy can become general.

Jermyn Street, St. James's. J. RICARDS.

Account of Diseases in an Eastern District of London, from August 20, to September 20, 1808.

ACUTE DISEASES.	
Typhus - - - - - - -	6
Scarlatina - - - - - -	9
Cholera - - - - - -	7
Dysenteria - - - - -	10
Rheumatismus Acutus -	4
CHRONIC DISEASES.	
Tussis - - - - -	10
Dyspnœa - - - - - -	15
Tussis cum Dyspnœa -	7
Hæmoptysis - - - - -	5
Diarrhœa - - - - -	18
Enterodynia - - - -	6
Ascites - - - - - - -	4
Anasarca - - - - - -	8
Hæmorrhois - - - - -	6
Prolapsus Ani - - -	4
Leucorrhœa - - - - -	7
Amenorrhœa - - - - -	12
Menorrhagia - - - - -	5
Prolapsus Vaginæ - -	2
Paralysis - - - - - -	3
Vertigo - - - - - - -	4
Hypochondriasis - - -	4
Rheumatismus Chronicus	14
PUERPERAL DISEASES.	
Enteritis - - - - - -	3
Dolores Post Partum -	7
Œdema Puerperalis - -	1
INFANTILE DISEASES.	
Diarrhœa - - - - - -	15
Hydrocephalus Internus	1
Aphthæ - - - - - -	7

The diseases which are most frequently observed in the autumnal months now begin to shew themselves. Disorders of the bowels are becoming very frequent, and, in some instances, prove very tedious and obstinate. Diarrhœa, Dysenteria, and Cholera are very general. The first of these, when restrained within certain limits, hardly deserves the name of disease, in any other sense than every effort of nature to throw off what is burdensome and offensive, when too violent or irregular, may be termed morbid. If a diarrhœa be not accompanied with pain, or if the pain be relieved by the intestinal discharge; if the appetite be not impaired, nor the strength of the patient too much reduced, this evacuation may be suffered to continue at least for some time, without any material injury. If however by the long continuance, or the excessive degree of it, the strength is much reduced; if the uneasiness and pain of

of the bowels, which at first preceded the discharge, have ceased, and the evacuation seems to be continued either from weakness or habit, small doses of the pulv. rhei combined with the pulv. é cret comp. may be taken with advantage; but the too early application of astringent remedies is often attended with inconvenience, and sometimes with danger.

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

Extract of a letter from the Baron Delaferronnays to the Editors, dated Weymouth Street, Sept. 12, 1803.

"A few weeks ago the 51st Number of the Medical Journal came into my hands; and in your Address to Correspondents, I observed that you had received several accounts of the success of the Iceland Lichen in pectoral complaints. In this article it is observed, that if the remedy were more completely employed, and, above all, that if practitioners and their patients had more perseverance in the use of it, instances of its success would be far more frequent. Permit me to support this opinion by relating the case of Madam the Baroness Delaferronnays, my lady, who owes her present health entirely to the steady use of this lichen both as medicine and aliment.

"This lady had laboured under a humid asthma for several years, which proved extremely distressing to her, as she was often nearly suffocated; and whenever she attempted to walk more than 200 paces, the stricture across the chest obliged her to rest. A cough, not less violent than frequent, tormented her continually, which was attended with an abundant expectoration, streaked with blood, and of a purulent appearance. The fever, loss of appetite, and even of sleep, alarmed me in the greatest degree. Hearing of Dr. Regnault's success in treating diseases of the chest, I consulted him about eleven months ago; he recommended the Baroness to take the decoction of the lichen with the concentrated syrup, and to breakfast every morning on the Iceland chocolate,* with a suitable diet. In about fifteen days she appeared to me evidently better; the fever had abated, and the expectoration seemed of a better

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* These preparations are explained in Dr. R's book, and may be had at Mr. Huguenin's, No. 33, Haymarket. Ed.

ter colour; her appetite and sleep returned; and by the uninterrupted use of the lichen and its chocolate jointly, under the care of Dr. R. the shortness of breath on walking, and the suffocating attacks which had so long harrassed the Baroness, entirely left her; and it is now four months since she left off the use of a remedy, for which she had no farther occasion. I judged it right, as well for the cause of humanity as that of truth, to send you this account, being persuaded that these are the objects of your Journal.

"CASE II. Mrs. Swinburn, No. 12, Great Quebec Street, has been, since last winter, subject to harrassing defluxions of the head. About the month of May, after a severe affliction, she was seized with a violent spasmodic cough, followed by an inflammation of the lungs. All the usual means were employed, such as venæsection, blisters, &c. but the fever, which had been acutely inflammatory, assumed the character of a low fever, attended with a continual cough, expectoration of a purulent appearance, and extreme weakness. This patient, resigned to death, had settled her spiritual and temporal affairs, when, in the month of July, she commenced the use of the Lichen Islandicus. Its effect has been astonishing; the cough diminished, the expectoration became easy, her strength returned, the fever disappeared, and at the end of a month Mrs. S. was perfectly cured. She continued the use of the lichen, however, some days longer, and at the end of August she left it off, finding her health better than it had been for many months before."

Extract of a Letter from our Correspondent at Paris, dated August, 1803.

"PARIS has for some days rung with relations of the wonderful exploits of a Spaniard in this city, who is endowed with qualities by which he resists the action of very high degrees of heat, as well as the influence of the strong chemical re-agents. Many histories of the trials to which he has been submitted before a commission of the Institute and Medical School, have appeared in the public papers; but the public wait with impatience for the report to be made in the name of the commission by Professor PINEL.

"Until this report, which will contain a variety of details on the mode of conducting the experiments, be made known, your Correspondent sends some of the more remarkable circumstances, of which he has been himself a witness.

"The subject of these trials is a young man, a native of Toledo in Spain, twenty-three years of age, and free of any apparent peculiarities which can announce any thing remarkable in the organization of the skin; after examination, one would be rather disposed to conclude a peculiar softness than that any hardness or thickness of the cuticle existed, either naturally or from mechanical causes. Nor was there any circumstance to indicate that the person had been previously rubbed with any matter capable of resisting the operation of the agents with which he was brought in contact.

"This

"This man bathed for the space of six minutes, and without any injury either to his sensibility or the surface of the skin, his legs in oil, heated at 97 deg. of Reaumur, (250 ¼ deg. of Fahrenheit*); and with the same oil, at the same degree of heat, he washed his face and superior extremities. He held for the same space of time, and with as little inconvenience, his legs in a solution of muriate of soda, heated to 102 of the same scale, (261 ½ Fahr.) He stood on and rubbed the soles of his feet with a bar of iron heated to a white heat; in this state he held the iron in his hands, and rubbed the surface of his tongue.

"He gargled his mouth with concentrated sulphuric and nitric acids, without the smallest injury or discolouration; the nitrous acid changed the cuticle to a yellow colour; with the acids in this state, he rubbed his hands and arms. All these experiments were continued long enough to prove their inefficiency to produce any impression. It is said, on unquestionable authority, that he remained a considerable time in an oven heated to 65 or 70 degrees (178--189 Fahr.) and from which he was with difficulty induced to retire, so comfortable did he feel that high temperature.

"It may be proper to remark, that this man seems totally uninfluenced by any motive to mislead, and, it is said, he has refused flattering offers from some religious sectaries of turning to emolument his singular qualities; yet, on the whole, it seems to be the opinion of most philosophical men, that this person must possess some matter which counteracts the operation of these agents. To suppose that Nature has organized him differently, would be unphilosophic; by habit he might have blunted his sensibility against those impressions that create pain under ordinary circumstances; but how to explain the power by which he resists the action of those agents which are known to have the strongest affinity for animal matter, is a circumstance difficult to comprehend. It has not failed however to excite the wonder of the ignorant, and the inquiry of the learned at Paris.

Observations on the Barbary Coast; communicated to DR. MITCHILL, *by* DR. GEORGE DAVIS, *Surgeon to the American Fleet.*

I have been in Tangiers, but can offer few remarks on the place. The plague prevailed in this town, a few years since, with much mortality. If it proves epidemic in Tangiers, with all the advantages of its local situation, its commercial intercourse with the adjacent countries, as also its being the residence of all consuls, who ought to be supposed to have some influence with the police of the country, particularly as it relates to the general health; the other dominions

* As the method of converting the degrees on Reaumur's thermometer to those on Fahrenheit is not generally known, we insert the rule: multiply the number on Reaumur by 2¼, and add 32 to the product. The heat of boiling water is 212° of Fahrenheit.

dominions of the Emperor of Morocco will always be harrassed, in a greater or less degree, by this child of filth and nastiness.

The lower class, who are indeed three-fourths of the inhabitants, contrary to the injunctions of Mahomet, neglect, in a most beastly and filthy manner, their persons, as it respects cleanliness; a woollen waistcoat, with a haick, or a course woollen frock belted round, being their only dress, and which, I am told, is often worn without shifting, until the ravages of time save them the trouble of removing it. The mode of building their houses, which are low, without any windows, and communicating one to the other from the roof, must have its influence.

The streets are narrow throughout all Barbary, and the receptacle of every species of filth and nastiness. The extreme poverty and indolence of the people, together with the miserable diet on which they subsist, must prove powerful agents in the production of this disease, which, once set in action, is greatly assisted by what they conceive the only means of arresting its progress.

Dr. Trotter, in a letter to the Editors, dated Newcastle upon Tyne, August 14, 1802, says:

"About ten years ago, I had it in contemplation to comment on the subject of my Inaugural Dissertation;* and was forming the plan of an Essay on Drunkeness, and its Effects on the Human Body, when I was ordered to sea, at the beginning of the late war. To this task I was recommended by my friend and preceptor Dr. Cullen, and the present Professor of the Practice of Medicine in Edinburgh. Studies of a different nature having from that time engrossed my attention, it was not till now that I was able to resume my inquiry.

To such of your Readers, who have had any considerable share of the practical part of our art, or have profited by an extensive intercourse with mankind, this subject will appear of great importance. It is certainly one, as connected with the duties of our profession, that requires more address and knowledge of human nature, than almost any other. The phenomena attendant on ebriety, draw forth some of the most singular and interesting propensities that are to be met with in the character of rational beings. The life of a fellow creature often depends on the treatment of the drunken paroxysm; frequent intoxication paves the way to a multitude of diseases; it exhibits in glowing colours the strong attachments of habit, and how difficult to be overcome; in short, independant of the moral evils which it occasions, no human infirmity stands more in need of medical investigation.

Should

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* Dissertatio Medica
Inauguralis
Quædam, De Ebrietate
Ejusque Effectibus
In Corpus Humanum
Complectens.

Should, therefore, any of your Readers be disposed to favour me with any Facts, Cases, Histories, Cures, or Dissections that relate to my subject, I shall most gratefully receive them, and most faithfully acknowledge their communications.

Mr. Carpue, in the presence of Dr. Pearson, and several other medical gentlemen, has repeated the Galvanic experiments on the body of Michael Carney, the criminal lately executed in London for murder. The principal object was to ascertain, whether Galvanism, applied immediately to the nerves, could excite action in internal parts, and particularly those subservient to respiration. With this view, an opening was first made into the wind-pipe, and about three pints of oxygen gas thrown into the lungs; the phrenic nerve was then exposed to conductors applied to it, and the inside of the rectum, the lungs being at the same time occasionally inflated; yet no action could be excited in the diaphragm;—the nerves do not seem to be conductors of the Galvanic fluid. Conductors applied to the inside of the rectum and nostrils, excited very considerable contractions in the right auricle more than three hours after death; the ventricles were, as in Prof. Aldini's experiments, perfectly motionless; the distortions of the muscles of the countenance, &c. were nearly the same as on the former occasion. The experiments were conducted with perfect accuracy and science, but no new fact appears to be ascertained.

The Academy of Gottingen, which, say the foreign journals, has always distinguished itself by the importance and wisdom of the questions which it holds out to candidates, had proposed one relative to that terrible and fatal epidemic malady, called the Yellow Fever. Dr. Guttfeldt, who obtained the accessit from the Academy, has recently translated his Latin Memoir on this subject into German. He seems to think that the malady should not take its denomination from one of its accidental symptoms; it is, says he, the typhus of the tropical regions, the first notice of which we owe to Father Labat, who treated of it under the name of the *Siam Fever*, and was himself infected with it at two different periods, in the years 1694 and 1697. No further notice has been taken of it since; but during the last ten or twelve years we are unhappily but too well acquainted with its effects, though not with the real nature of the disorder itself, from the want of enlightened physicians and accurate observers. In the last century this epidemic ravaged America more than twenty times; the yellow colour is not a symptom inseparable from the malady; it sometimes does not appear even at the point of death; a blackish hue has been found in some individuals. According to the author, the cause of this malady is a suppressed irritation, an asthenia, and the remedies proper to be applied ought to be antiasthenic. Hitherto, he observes, very few patients have recovered from it. M. Guttfeldt thinks that the decrease of bodily strength has greatly contributed to propagate the malady, which originally was not perhaps contagious.

Westminster Hospital, Sept. 22, 1808.

Mr. Lynn and Mr. Carlisle purpose, during the ensuing winter, to give Demonstrations illustrative of all the Operations in Surgery; and Mr. Carlisle will occasionally deliver Lectures on several subjects connected with the education of Surgical Pupils. These instructions will be confined to the Pupils of the Westminster Hospital only. For the Terms of the Hospital, and all other particulars, applications are to be made to Mr. Lynn, in Parliament Street, to Mr. Carlisle, in Soho Square, or at the Hospital, in James Street, Westminster, on Wednesdays or Saturdays, at half past 12 o'clock. — Mr. Carlisle will deliver an Introductory Discourse explanatory of this Plan, on Thursday, October the 6th, at eleven o'clock in the forenoon, in the Theatre of the Hospital.

Dr. Badham, one of the Physicians to the Westminster Dispensary, Gerrard Street, proposes to deliver during the winter, two Courses of Lectures on Chemistry.

John Pearson, F.R.S. Senior Surgeon of the Lock Hospital, and Asylum, and of the Public Dispensary, will commence the Autumn Course of Lectures on the Principles and Practice of Surgery, on Monday, October 3, at seven in the evening.

Mr. Thomas's Lectures on the Operations of Surgery, will commence in Leicester Square, about the end of October. A Prospectus may be had at his house, or at the Anatomical Theatre in Windmill Street.

In the course of this month Mr. Macartney will commence his Lectures at St. Bartholomew's Hospital, upon Comparative Anatomy, and the Laws of Organic Existence.

Mr. Moor, surgeon dentist to Her Royal Highness the Duchess of York, will commence a Course of Lectures on the Structure and Diseases of the Teeth, on the 4th of November, in which will be explained the Complete Practice of the Dentist. Further particulars may be known by applying at his house, No. 6, Palsgrave Place, Temple.

Dr. Blackburn's Observations on the Prevention and Cure of Scarlet Fever, with Remarks on Acute Contagions in general, are in the Press, and will be published in a few days.

TO CORRESPONDENTS.

Tyrocola's reply to Dr. Mossman, and Empiricus's to Dr. Magennis on Apoplexy, are postponed for want of proper signatures.

Communications are received from Mr. Weber, Mr. Thoresby, and Mr. Marson.

Mr. Smith's request is complied with.